Appendix 1

RESEARCH TABLES

APPENDICE 1

1. Tracking of PA and sport participation from adolescence to adulthood

Autors	País	Any	Subjectes	Objectius	Metodologia	Variables mesurades	Resultats Principals	Conclusions	Limitacions de l'estudi	Estudis futurs
1. Azevedo, M.R., et al.	Brasil	2007	2.577 subjects aged – 20 to 59 Y.O.	To assess the association between regular PA in adolesc. And leisure-time PA in adulthood, with special emphasis on gender differences.	-Population-Based cross - sectional study. Quest. -Face to face interviews.	**PA in adulthood** - The leisure-time section of the International PA Questionnaire (IPAQ). A cut-off value of 150 min per week was used to classify actives. **PA in adolescence (10-19 Y.O)** - Subjects' recall: Activities performed in health clubs, join clubs, and at school. For at least 6 months. **Prevalence of adequate PA:** -Levels of PA in adulthood were compared with regular PA in adolescence. S**ex, age, skin color and SES:** -Quest.	**PA in adulthood:** -The proportion of adequately active individuals in leisure time was 27.5%. -Men were more likely to be adequately active than women. (33.4% *vs* 22.8%) **Prevalence of PA** -Subjects who were engaged in regular PA during adolescence were more likely to be adequately active in adulthood. (r=1.75.) - The prevalence was higher among men (69.2%) than women (43.5%), although the effect of adolescent PA on the level of activity during adult life was higher in women than men. r=1.51 for women and 1.35 for men. -The prevalence of regular PA in adolescence was negatively related to current age – on the 1980's there was a wide knowledge about health benefits of PA.	-Entertainment has been shown to be the main reason for PA among men. - Among women the belief for health and esthetics reasons were more frequently reported.(Also Monteiro, 1996). -Although women were less active than men both in adolescence and adulthood, tracking of PA was stronger in women than men.	- The instruments and criteria for defining levels of activity points were not consistent. - Recall Bias needs to be considered. Although they included only activities performed for at least six consecutive months, adults can easily overestimate their energy expenditure in adolescence.	- Long term follow up studies. - Recall studies need to be very well planned to avoid Bias. -Promoting PA at school age and taking gender differences into account can be a successful intervention against inactivity both in high and low-income countries.

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2. Tammelin, T., et al.	Finland	2003	5286 males and females complete the quest. At age 14 and 31.	-To evaluate the association between participation in various types of sports in adolescence and the level and types of PA in adulthood. -To assess the social determinant of participation in various type of sports during adolescence.	Follow-up evaluations carried out in 1980 and 1997–1998. Using quest.	**PA at the age of 14:** -Quest. about participation in sports after school hours (days x Week). **Social determinants:** - Teens were asked about memberships in a sports club outside school, grade in school sports, father's occupation and the place of residence. **PA at the age of 31** -How often they participate in light and brisk PA, and also in certain types of PA during the previous year. The subjects were classified into: very active, active, moderately active, and inactive.	**PA Incidence** -At age 14, the percentages of those who participated in sports daily, every other day, twice a week, once a week and less often than once a week were 18%, 20%, 22.5%, 16%, and 23.5%.. -At age 31, the percentages of very active, active, moderately active, and inactive persons were 12.5%, 28.5%, 29%, and 27%. **Association between adolescents and adults** -Participation in sports in adolescence every other day was associated with being physically active in adulthood (r=2.5 for males and r=2.0 females). **Type of Sports and prevalence** -27% prevalence of participation in ball games. -40% of males who had played soccer at age 14 participated in some kind of ball game at age 31. - Some sports were not associated with high level of activity in adulthood: walking (r=1.16) and skating (r=0.96) and in males also in cycling (r=0.80) and strength training (r=0.83). - Participation in relatively intensive endurance sports (skiing, running and orientating) is related to endurance activity in adults. (r=1.67) **Social Determinants** -Skiing, dancing, orienteering, and riding – related to adolescence from highest social class. Participants in strength sports, walking, cycling, and soccer - lower social class. -Urban Adolescences were related to combat sports, riding, skiing, and dancing. Rural residences were related to volleyball, cross-country skiing, and running.	- Positive experiences and a wide range of sports skills acquired in childhood may be the best preparation for lifelong PA. - The opportunities to participate in a wide range of activities in adolescence may maximize the probability that one of the activities suits the needs and skill level of the young person and the desire to continue participation into adulthood. -Participating in organized sports during adolescence was associated with active life in adulthood - SES* of the family and place of residence appeared to be related to participation in adolescent sports.	-The findings in this group of Finnish subjects cannot be generalized directly to other countries with different geographic and sociopolitical situations. - The society and also the types of sports among adolescents have changed considerably since 1980. Those adolescents who participated in cycling and walking at age 14 (not associated with activity in adults) did not participate in any other particular sport but simply wanted to register activities on the quest.	

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3. Telama, R.	Finland	2009	48 Studies revision. Aged from 3 to 73 Y.O.	-To review studies on the tracking of PA in all phases of life from childhood to late adulthood.	-Systematic review of longitudinal and retrospective studies.	**PA** Accelerometers, Heart Rate, questionnaires, pedometers, interviews, Kcal, METs, self reports, family report, diary. **Tracking of PA** -Spearman's rank order correlation. - Distribution of PA and PI into tertiles, quartiles and quintiles.	**The follow-up time** - Ranged from 1 to 55 years, with a median of 9 years. **-**The follow up time influences in PA tracking correlation. In one Finnish study, stability over 5 years in 18- to 64 Y.O was 0.46 (M) and 0.34(F) and stability over 10 years was 0.25(M) and 0.29(F). **PA Tracking in childhood** -Few studies reported. - The studies using objective methods like accelerometer (r =0.35-0.40) and heart rate recording: (r = 0.57) reported a higher levels of tracking PA than direct observation (r = 0.27). **PA Tracking in adolescence** 4 out of 5 of the studies reviewed show a moderate PA tracking in teens: (r= 0.30 – 0.56). **PA tracking from childhood to adolescence** 3 studies based on self-report measures have reported low/moderate tracking (0.13-0.43). **From childhood and adolescence to adulthood** -The tracking coefficients from adolescence to young adulthood (<30 years) are low. Male's correlation varied from 0.15 to 0.44 and females correlation (0.09 to 0.34). -One study found that PA at age 16 strongly predicted PA at age 27 among female, r =0.66. However 3 studies reported non-significant tracking from adolescence to young adulthood among women. - Among men, the long-term stability	**Follow up time** -The decline along follow up time can be influenced by life changes, mortality and morbidity. **Gender difference** Tracking were more often lower in women than men. Reasons: -Lower participation rate among female than among male subjects. - Major transition in the course of life for women (marriage, having children…). -Lower opportunities for PA among women. **Tracking PA** - PA has significantly low or moderate stability during all life phases. -Stability seems to be lower in transitional phases. It is low or non-significant from adolescence to young adulthood. -The level of reliability and tracking of PA seems to vary according to the type of activity. - Organized activities were found to be better in tracking PA than other activities. Also because they are easy to recall. - Cultural background

							of PA from adolescence to adulthood ≥30 is low but significant (r=0.14-0.44). In female many non-significant relationships indicate poorer stability. - Retrospectvie studies show long stability of PA. **PA tracking in Adulthood** 3 studies reported moderate PA tracking among young adults (r=0.35-0.49) (18-32 Y.O) An American study show a low correlation(r=0.21), in both sexes from age25 to 29. **Cultural Background** -Higher level tracking results from Finland and from other Nordic countries as compared to results from the USA and some other countries. No statistical analysis made.	can be a factor affecting the tracking of PA. - Some evidence that inactivity tends to track better than activity. - The 'carry-over value hypothesis', the 'ability and readiness hypothesis', 'habit formation hypotheses, and 'self-selection hypotheses, can explain the tracking of PA.

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4. Telama, R. Et al	Finland	2007	2309 (1563 participated during all the process). Males and females from 3 to 18 years old. Study started in 1980.	-To investigate stability of PA from childhood and adolescence to adulthood in multiple age cohorts. -To analyze how well adult PA can be predicted by various PA variables. -To reveal the influence of the type of sport practiced in youth on adult PA.	**Longitudinal study.** - The measurments were taken on 1980, 1983, 1986, 1989, 1992, and 2001. In 2001, the subjects were aged from 24 to 39 years. The questionnaire on PA used for children and adults was different.	**PA and participation in sport (subjects ≤ 9 Y.O):** -Self reported quest. + Medical examination. Index of PA was calculated. -102 subjects underwent a maximal cycle ergometer exercise test. **Indicator of Tracking** -Spearman's rank order correlation. **Influence of the type of PA** -Univariate analysis of variance (ANOVA).	**Tracking of PA:** -The 21-year tracking coefficients from youth to adulthood vary from 0.33 to 0.44 in males, and from 0.17 to 0.26 in females. - The 9 years tracking coefficients vary from 0.37 to 0.61 in Males and 0.31 to 0.51 in Females. - Between the ages 15 to 24 the tracking is 0.37 for M, and 0.34 for F. - Between the ages 15 to 27 is 0.44 for M, and 0.18 for F. - Males who participated ≥6 years in one sport were 19 times more often of being active in adulthood than inactive. **Type of PA** **-**The Index of PA scores in 2001 of the players of two team sports (soccer and ice hockey) were higher than those of the participants in running, cycling, and other activities.	**Tracking PA** -PA from age 9 to 18 significantly predicted adult PA. - Six years of continuous PA meant higher probabilities of being active in adulthood -Tracking correlation tends in general to be greater over a shorter rather than a longer period. -Many factors influence PA in adulthood, such as education, occupation, living environment, marital status, having children, health attitudes, and perceived weight, especially in females. -PA tracked better in males than in females. **Types of PA** -Level of activity in adulthood did not depend on the type of PA at a young age. -Participation in general PA and sports, and continuous participation at school age, are more important than participation in specific sports.	-The capacity of children (aged _12) to answer questionnaires reliably.	

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5. Boreham, C. Et al.	Ireland	2004	245 Males and 231 Females assessed at age 15 and again at age 22 (mean (SD)–1.6 y).	To determine the extent of tracking between adolescence and young adulthood, of PA, aerobic fitness, selected anthropo-metric variables, and diet.	-Longitudinal study using surveys from the Young Heart Project in Northern Ireland given in two waves (1992/1993 and between 1997 and 1999).	**Anthropometric** **-**Height. -Weight. -Skinfold thickness: Using Harpenden Calipers at: Biceps, triceps, subscapular, suprailiac. **Dietary intake** **-**The diet History method: Detailed, open ended, one to one interviews. **PA** For adolescents: **-**Self reported quest. For adults: -Baecke quest. **Aerobic fitness** **-**20 metre shuttle test for adolescents. - Cycle ergometer test for adults.	**Physical characteristics and PA levels.** - Average weight (58Kg (age 15) - 69.9 (age 22)). - Height (1.65cm – 1.71cm). - BMI (21.05Kgm^{-2} - 23.8Kgm^{-2}). -Skinfold thicknesses (40.81mm - 51.60mm) -VO^2max was significantly lower in adults (32.92 ml/Kg) than in teens (46.56 ml/Kg). **Energy and macronutrient intakes.** **-**Young adults presented a lower intake of energy (11.45 vs. 10.65Mj/D), total fat (116.90 vs. 93.25 g/D) and total carbohydrate (350.6 vs. 311.10 g/D). - Young adults presented higher intake of protein (79.45 vs. 84.85 g/D). **Tracking of VO2 max and PA.** -Tracking of aerobic fitness was poor for both males (κ= o.150) and lower for females (κ=0.076) and also for PA scores (0.202 (males) and 0.021 (females). **Tracking of food intake** Poor κ values for energy, protein, total fat and total carbohydrate ranging from 0.019 to 0.169 (for males) 0.051 to 0.202 (for females) **Anthropometric tracking** **-**Tracking of BMI was moderate (0.422 for males and 0.452 for females) and fair for the sum of skin folds (0.216 (M) and 0.357 (F)).	**Food intake** -Individual dietary patterns exhibited at 15 years are unlikely to be predictive of dietary intakes at young adulthood. -Adolescence is associated with erratic patterns of nutrient intake, but they take increasing control of what, when and where they eat. **PA and fitness tracking** -Poor tracking for fitness in both sexes, and poor tracking in females and only moderate levels of tracking in males for PA. Possible reason for that: During adolescence PA is organized and school based, in early adulthood PA is likely to be more a matter of choice. **Anthropometric tracking** Good tracking of BMI indicate is a good option to identify adolescents at the age of 15 years who are at risk of persistent obesity.	- The diet history method is susceptible to socially desirable responding.	The results for diet, PA and fitness, imply greater instability from adolescence to young adulthood, and consequently the need for shorter term, better strategies based on regular monitoring of these behaviors and attributes.

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6. Malina, R.	U.S.A	2001	Revision of studies. Subjects from 3 to ≥50 Y.O.	To consider evidence for tracking of indicators of PA during childhood and adole-scence, from adole-scence to adulthood and into adulthood.	-Systematic review of longitudinal and retrospective studies. 313 correlations analized.	**PA in childhood** Teachers rating, total energy expenditure, quest. and % of time that heart rate (HR) was ≥50% of resting HR between 3 and 6 pm. **PA in adolescence** Short quest. focused on leisure time activity and sport. Personal interviews. Anthropometric measurments. **Lifestyle behaviors in adulthood** Survey of lifestyle behaviors. **PA in adulthood** Weekly energy expenditure.	**PA in childhood** -Studies indicate low to moderate tracking of PA (r between 0.10 and 0.65) -Values decline with longer intervals. **PA in adolescence and the transition to adults.** **-**Correlations are generally moderate (r: 0.20-0.60), but decline as the intervals increase (18 to 21 Y.O r=0.55 and 18 to 30 Y.O r=0.25). -Interage correlations of PA for intervals beginning at 18 Y.O (mean: 0.41) tend to be higher than those begining at 9 Y.O. (mean: 0.27). -Correlations for frequency of sports club training (from 0.49 to 0.71 in the 18-21 Y.O) tend to be higher than frequency and intensity of general PA at the same age (from 0.20 to 0.55). **PA in adulthood** **-**Correlations range from low to high (0.10 to 0.80). -Correlations decline with longer intervals. **-**Teachers ratings of proficiency in sport at 13 Y.O and level of energy at 15 Y.O are related to PA at 36 Y.O in both men and women. (r of 1.35 and 1.62 respectively). **Lifestyle behaviors** **-**Health and social variables were more important predictors of adult sport participation in men. -Health status, education and income were important predictors of adult sport participation in women.	Data suggest some degree of stability of tracking coefficients within an age period and across varying intervals. The higher interage correlations for sport participation scores suggest that more attention should be given to this context of PA in adolescents and young adults. Many and different factors influence PA during childhood, adolescence and adulthood. PA is a biocultural behavior: The individula expends energy or applies ground reaction forces in movement behaviors that occur within a cultural context.	Retros-pective studies have limitations related to accuracy recall. Biologically related variables and indicators of Physical Fitness are not commonly included among determinants of PA. Correlations do not establish a cause effects sequence.	To facilitate recall of PA a "cognitive interview", based on principles of cognitive psychology can be used. Determinants or correlates of PA, as well as individual differences, need to be considered in studies of tracking. It is important to relate PA habits to ethnicy. PA needs to be studied bioculturally.

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7. Ortega, F. Et al.	Espanya	2005	N=2859. Home: 1357 Dones: 1502. 13-18 anys.	Determinar els nivells de condició física dels espanyols. Conèixer la proporció d'adolescents espanyols que no assoleixen els valors de capacitat aeròbica indicatius de salut cardiovascular futura.	Estudi Transversal amb una mostra aleatòria de diferents instituts de secundària. Qüestionaris autoadministrats. Estudi AVENA.	**Condició Física:** 6 proves: -Flexió de tronc. -Dinamo metria manual. -Salt de longitud Suspensió amb flexió de braços. -Carrera 4x10m. -Course Navette	**Condició Física** **-**Els nois mostren una millor condició física en força i resistència i les noies en flexibilitat i agilitat. - La resistència (capacitat aeròbica) augmenta fins els 16 anys en ambdós sexes però llavors disminueix lleugerament (16 anys: 4.28, 18 anys: 4.00 entre les noies i 7.36 (16 anys) i 7.26 (18 anys) entre els nois. -Un 19.3% dels nois i un 17.3% de les noies avaluades presenten riscs cardiovasculars. L'umbral de risc CV correspon a un VO2mac de 42 ml/Kg/min pels nois i 35 per les noies -Subjectes que presenten una baixa capacitat aeròbica presenten també nivells baixos dels altres paràmetres mesurats amb diferències significatives ($p \leq 0.001$).	Conèixer el nivell de condició física de cada adolescent és important per establir futur risc CV. Els resultats de la cap. aeròbica s'han comparat amb 15 països i els adolescents espanyols presentaven pitjor capacitat aeròbica que en 11 dels països. El risc CV està més condicionat per la forma física que s'assoleix que per el nivell d'AF que es realitza.	Comparació amb altres països no és molt fiable tan per les diferents metodologia com per estudis realitzats ja fa uns anys. 1 de cada 5 adolescents es troba en l'actualitat en risc de patir malalties CV.	Els centres sanitàris i acadèmics son eixos essencials per una detecció ràpida i una actuació inmediata de possibles riscos CV. ÉS necessari implementar programes que millorin la condició física dels adolescents. Treballs futurs es poden centrar en estudi de les característiques antropomètriques, el perfil lipídic o la pressió arterial dels adolescents, característiques que també afecten al risc CV.

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8. Hasse, A. Et al	UK	2004	19.298 university students aged 17 to 30 Y.O.	To analyze the prevalence of PA in university students from 23 different countries. To investigate systematic differences of PA levels across countries. To evaluate the strength of individual attitudes concerning the benefits of PA.	International Health and Behaviour survey. Cross-sectional questionnaire study.	**PA** -The individual had taken any exercise in the past two weeks. -Number of PA sessions over two weeks. -Following ACSM guidelines. **PA knowledge** **-**A belief rating of how important PA was for the maintenance of health. **SES of countries** Gross Domestic Product (GDP).	**PA** More women than men reported no leisure time PA (38% Vs 27%). Recommended levels of leisure time PA was more common in men (28%) than in women (19%). No overall difference in the proportion of men and women active at low frequency (45% vs 43%). **PA x countries** Prevalence of PI ranged from 11% (Belgium) to 41% (Portugal) in men and 15% (USA) to 65% (Portugal) among women. In Spain was 23% for men and 50% for women. Prevalence of leisure-time PA was positively correlated with economic development (r = 0.49). **PA knowledge** 40–60% of students were aware that PA was relevant to risk of heart disease. In Spain this knowledge was 42%. Strong beliefs about the importance of PA for health were related to recommended levels of PA (r=2.48).	Levels of leisure PA are generally higher in more economically developed countries, with the exception of Mediterranean countries. The knowledge about the specific health benefits of PA is more strongly associated with economic development than with cultural and political factors. It may be that other motives apart from health benefits determine the higher prevalence of leisure PA in economically developed countries. Improving knowledge about health effects should not be expected to be an effective PA promotion strategy.	Beliefs in health benefits may stimulate PA, but might also emerge in people who are currently active. The survey was not carried out with representative samples of young adults from the countries involved. The study was based on self report measures, and causal conclusions cannot be drawn.	Examining a broader range of psychosocial variables may help explain the variation in frequency of leisure-time PA across countries.

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9. Carratalà, V. et al.	Espanya	1999	1053 nois i noies de 15 a 17 anys. 464 no esportistes i 589 esportistes.	Conèixer les diferències entre nois i noies adolescents esportistes i no esportistes, respecte les motivacions pel què fa la pràctica esportiva i altres act. d'oci i temps lleure.	Estudi quantitatiu. Qüestionaris.	Escala de motivaciones esportives i escala d'activitats en el temps de lleure.	La majoria d'adolescents que practiquen un esport federat son nois (66.9%), mentre que en el grup de no esportistes hi ha més prevalència de noies (56.7%). El grup d'esportistes (1.32) són els que manifesten una participació més gran en activitats socials (estar amb els amics...). Els nois tenen més predisposició a realitzar entrenaments (0.86). Els esportistes (tan nois com noies) són els que fan més act. laborals (1.27). L'esport més practicat (22.8%) és el futbol. En la variable imatge social els homes obtenen una puntuació més elevada que les noies (54.18 Vs 42.91).	Els principals motius per fer AF son: Tenir una bona forma física, tenir una millor imatge social (tan estètica com de reconeixament). Les act. d'oci preferides entre els esportistes és mirar la tele i sortir de festa, mentre que entre els no-esp. és: no fer res/fer el manta Els esportistes estan més predisposats a treballar.	És un estudi antic.	

2. Sport participation, substance use and fruit and vegetable consumption.

2.1 Tobacco, cannabis and alcohol consumption considering sport participation

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
1.Tercedor, P. Et al	Espanya	2007	2.859 adolescents espanyols (1.357 homes, 1.502 dones(13-18,5 anys).	Conèixer la relació existent entre la pràctica d'Activitat Física i el consum de tabac entre la població adolescent.	Estudi transversal, descriptiu i no experimental a través de qüestionaris autoadministrats. Estudi AVENA. Anàlisis: Anàlisis Factorial de Components principals Índex de Youden.	-Nivells d'Activitat Física -Consum de tabac.	- Un 40,8% dels adolescents varen ser classificats com físicamente inactius. - Un 71,1% dels nois*vs* 46,7% de les noies són físicament actius. - El 23.3% dels adolescents consumeix tabac habitualment. Lleugerament en major quantitat les noies. - Tant amb homes com en dones els adolescents actius mostren un menor consum de tabac. Un 80.9% dels Subjects actius diuen que no fumen, comparat amb un 71.4% dels no actius.	-Hi ha una relació significativa entre la pràctica d'AF i el consum de tabac entre els adolescents. -A més edat major consum de tabac i menors nivells d'AF tan en nois con en noies. - El consum de tabac estar vinculat a un mecanisme de control del pes corporal, un mètode per "calmar els nervis", una curiositat o bé un desig de sentir-se més gran. Almenys en 2 d'aquests motius existeix equivalencia sobre els motius que animen a una persona a practicar AF.	Falta una part qualitativa per conèixer les actituds i motivacions que animen els joves a consumir tabac.	És important realitzar intervencions a les escoles per disminuir el consum de tabac i augmentar la pràctica d'AF.

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2.Peretti-Watel, P-. Et al.	France	2001	10.807 teens (14-19 Y.O)	To understand the relationship between sporting activities and alcohol, cigarette and cannabis use among adolescents.	National School Survey Analysis: Cumulative Logistic Model Multinominal logistic model if the assumption was rejected. Odds Ratio.	Gender, age, sporting context. Alcohol, cigarette and cannabis use.	**Gender differences:** Boys played sport more frequently than girls (72.9% versus 52.0%, *p* <0.001), and they were more often registered in a club. Boys consume more alcohol and cannabis than girls. Girls consume more tobacco. **Sport and substance use** Among boys: Maximum report of cannabis use for non-athletes, and minimum for those who do 1-3 h/week. Girls: No difference. The proportion of heavy smokers was greater among non-athletes and intensive sportsmen; the proportion of daily smokers decreased with intensity of sporting activity. For alcohol the highest proportion of users was reached among intensive sportsmen. And the lowest point is between those doing 1-3 h/week. **Type of sport** Whatever the substance, the regular practice of a strength or combat sport (tended to be played by boys) was linked to more frequent drug use, whereas the regular practice of an athletic sport (by girls) was linked to less frequent use. From 16-19 Y.O those who play a team sport report higher level of recent drunkness than those doing athletics sport. The curve for those who regularly took part in strength or combat sport was always above the curve of those who regularly played a team sport.	The *U*-shaped curve between intensity of sporting activity and drugs use was not systematic: it depended on the substance and on the level of use.For example, it was not present for daily smoking but only for heavy smoking. For boys remained present in restricted cases: repeated use of alcohol, cannabis use and for heavy smoking. (some authors evoked that competitors may use tobacco to alleviate competition stress. Adolescents registered in a club reported less frequent use than those who were not. Boys who practiced sports alone or with friends consumed significantly more cannabis than those who played for a club (Beck *et al*. 2000). Logistic regressions showed a significant link between team sports and repeated use of alcohol (for both sexes) or recent drunkenness (only for boys). The induced sociability is more important than what sport is being played. The cultural meaning of team sports such as soccer or rugby, and their association with masculine values is an important factor. Regular practice of an athletic sport could be a 'protective factor' for both sexes.	When they observed different age groups the sample size and thereforeth e likelihood of observing siginificant relationshi ps were reduced Lack of sport classificatio n.	

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3.Aarnio, M.	Finland	2003	4906 boys and girls aged 16 followed up until 18.5 Y.O.	To describe PA patterns among 16-, 17-, and 18, 5 -year-old Finnish teens. To describe the stability of PA over three-year period. To study the associations of PA with other health habits in teens.	Longitudinal study . Questionnaires sent on the 16th and 17th birthday and again 6 months after their 18th birthday. Analysis: Cross tabs (Chi Square) Log Linear Models Spearman correlat. Logistic Reg.	**PA** Frequency Intensity **Sports** Type of sport Competition **Health related behaviours** Weight and Height Breakfast eating habits. Smoking habits Alcohol consumption **Social relationship** Working Attending to school Type of school Whom they spend their leisure time. **Parents SES** Parents occupation. **Health status** Perception of health Long term illnes.	Of the boys who participated in PA daily at the age of 16, 46.7% did so also at the age of 18, while only 1.7% was physically inactive (less than once a month) at that age. Girls who did in daily PA at the age of 16, 46.3% also did so at the age of 18, and only 2.8 % were physically inactive at that age. Among boys who participated in ball games 23.1% (girls 25.0%) were persistent exercisers, while among boys not participating in ball games the figure was 12.6% (girls 8.6%). **Health behaviors** The frequency of regular smokers at the age of 16 in the very active class among girls was 13.3%, (11.8% boys) and in the inactive class 55.6% (35.6% boys). At the age of 16 among girls, 9.8% of the very active and 29.7% of the physically inactive were heavy drinkers. Among boys, 14.0% of the very active and 26.1% of the inactive belonged to the heavy user class. Regular breakfast eating was associated with persistent exercising among boys and girls. Irregular breakfast eating only among persistently inactive boys. **Social relationships** Attending high school was significantly associated with persistent exercising, and attending vocational school with persistent inactivity among boys and girls: vocational school had ORs of 1.65 (1.04 to 2.62) (boys) and 1.83 (1.10 to 3.04) (girls) compared to high school students. In a three year follow up school type remained significantly associated with PA. **Health status** Boys and girls physically active reported higher perceived health status. After 3 years, good perceived current health was associated with persistent exercise.	Persistently active adolescents smoke less, have better health and nutritional habits and better self-estimated health than inactive adolescents. About a fifth of boys and every tenth girl were persistent exercisers over a 30-month period in late adolescence. Those participating in organized sports, ballgames and power types of sports appear to be more persistently active. Type of school and educational achievement, have an impact on persistent activity. *Smoking* was strongly associated with decreased PA level at the age of 16. In the three-year follow-up, alcohol use was no longer associated with persistent exercise or persistent inactivity. The role of the parents decreases in late adolescence and friends increase.	This work did not examine whether adolescents participate in sufficient PA.	Schools emerge as the key elements in promoting PA. Girls should be a special target group for promoting PA during late adolescence. Interventions should focus on finding new and appealing ways of organizing physical activity for children and adolescents who are relatively inactive and perhaps have less talent for competitive sports.

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4.Lisha, N. Et al.	U.S.A	2009	13-24 Y.O	To understand the relationship between sporting activities and alcohol, cigarette and cannabis use among adolescents.	Systematic review 34 peer-reviewed quantitative data-based studies	Cigarettes, alcohol and illicit drugs. Sport participation.	In 22 of the studies (out of 29) participation in sports was positively associated with alcohol. Ford's (2007) findings indicated that male hockey and female soccer players were the most likely to report high levels of consumption, while cross-country/track athletes reported the lowest levels. 14 studies, out of 15, found an inverse relationship; participation in sports was negatively related to cigarette use. In general participation in sport was related to lower illicit drug Use. However, two of the studies (Green et al., 2001; Rockafellow & Saules, 2006) found a positive relationship, and three studies found that it depended on sport and gender (Ewing, 1998; Ford, 2007; Peretti-Watel et al., 2001).	In general, alcohol use is increased among those who participate in sport versus those who do not. Reasons: 1.The competitive nature of athletes encourages sportspeople to drink larger quantities. 2. Stress related drinking. 3. Environmental influences of the athletes (teammates…) 4.Larger culture encourage an association between athletics and drinking behaviors. Participation in sport may serve as a protective factor against cigarette use. Reasons: 1.the perceived norms of sports group do not favor smoking. 2. Cigarette affects heart and lung function. The results on illicit drug use were not as consistent as with cigarette smoking or alcohol consumption.	Most of the studies do not adequately differentiate type of sport. Studies fail to report the intensity of drug use. Studies used self-report data to determine levels of drug use.	It might be interesting to examine whether sports that require lower physical demand (e.g. bowling or golf) have higher substance use than those where lung and heart functioning determines performance. In addition, one may speculate that sports involving relatively more antisocial/ aggressive behavior (e.g., hockey) might be associated with greater illicit drug use.

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5.Ruiz-Juan, F.	Spain	2010	6362 students	To measure alc. Consumption and PA levels.	Cross Sectional study. Quest. Habitos fisico-deportivos y estilos de vida. Measure the PA made during free time. (vigourous, moderate, light) Analysis: Chi Square.	Alcohol PA	There is a big changes in alcohol consumption from ESO to high school. Boys drink significantly more than girls. A positive correlation exists between being active and non alcohol consumption. The most sedentary are the ones drinking more alcohol units. However inside the physically active, doing vigorous PA is associated to higher alcohol consumption than doing moderate PA.	It is important to differenciate the type of PA made to associate with alcohol consumption.	There is no sport divisionb etween participa nts.	

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6.Lorente, F. Et al	França	2004	816 high school students (18.3 years old)	To examine the relation between participation in sports and alcohol consumption .	Cross sectional study Analysis: Pearson's Chi Square tests Logistic regressions to study the factors associated with alcohol use	Alcohol consumption + frequency Sport participation	Athletes were more likely to report alcohol use (P < .05). Participants who practiced only in a formal context, as a member of a club or association, who practiced at the regional level, and who reported a frequency of practice between three to five times per week, were more likely to report alcohol consumption. Participants who participated in group sports drank significantly more than those who participated as individuals. Multivariate analysis underlined factors associated with alcohol consumption, but these varied considerably according to the level of alcohol consumption. Three factors were associated with weekly and daily alcohol use: male gender, daily cigarette use, and perception of poor health.	Alcohol consumption seems to depend on numerous characteristics associated with the sporting activity, for example, the type of sport practiced, the context, competitive or noncompetitive sport, the level, and the number of training sessions. However, participating in sports at a national or international level and training more than six times weekly were associated with reduced daily alcohol consumption.	Lack of qualitat. Data. Absence of a detailed classification of sport activities Not examine the participants' attitudes to substance abuse, and we did not identify the type of alcohol consumed.	Future evaluations need to characterize more completely young teenagers who participate in sports and use multiple drugs.

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7.Moore, M	USA	2005	891 students from 8th grade. (age = 13.39)	To examine the association between participation in specific school-sponsored sports and out-of school sports/ physical activities and substance use.	Cross-Sectional study. Analysis: Chi Square T-test Logistic Regression	Sport participation Ethnicity Alcohol Cigarrettes Marijuana	Significantly more males than females participated inout-of-school sports/physical activities. Surfers, skateboarders and tennis players (males) were significantly more likely to use alcohol than nonparticipants in the respective groups, whereas out-of-school basketball players were less likely to use alcohol than non basketball players. Female out-of-school dancers/cheerleaders/gymnasts, skateboarders and surfers were significantly more likely to use alcohol than female nonparticipants in the respective groups. Intrapersonal factors such as valuing health, proclivity to risk-taking, rebelliousness, self-image, self-esteem, and susceptibility to perceived media images might affect an individual's desire to participate in a specific sport and to use/not use certain substances. External factors such as the sub-culture of a sport (e.g., peer norms, bonding, and initiation rituals), the type and quality of organizational structure, the time commitment to be involved in a particular sport, or coach expectations are other examples of possible influences on substance use and sport choice.	The main finding of this research is that there is not a consistent protective association between specific sports/PA and substance use. Some sports and PA were associated with an increased likelihood of substance use, whereas others were associated with a decreased likelihood of substance use. Furthermore, the analyses by gender found that those sports associated with an increased likelihood of use were different for males and females, as were those associated with a decreased of use. Although there are numerous benefits of youth participation in sports and PA, results from this study showed more negative than positive associations with substance use behaviors. A decision to participate in a particular sport or use a certain substance is likely to both grow out of and be reinforced by emerging adolescent identities, particularly those identities linked to finding one's place in the social milieu.	The data in this study were cross-sectional; therefore causation cannot be implied. Students were asked to check Which sports/PA they were participating in during the current year; the item did not specify duration, frequency, or intensity of sport participation, nor the level of organization for the out-of-school sports/physical activities. It was limited to 8th grade youth and therefore does not tell us of the differences in younger and older youth.	Future research in this area advances to include longitudinal studies that can investigate the underlying causal mechanisms and verify the directional relationships between specific sports/ PA and substance use.

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
8.Paavola, M	Finland	2004	903 subjects from 15 to 28 years old.	To assess the associations among smoking, alcohol use, and PA. To assess how the health behaviors predict changes in other health behaviors from adolescence to adulthood.	Longitudinal study Analysis: T-test. Chi-Square. Pair-Wise correlations (Steiger) Linear regression model.	Smoking Alcohol Use Leisuretime PA	Smoking correlated positively with alcohol use at all ages. PA was negatively related to smoking at each study point; therefore, smokers had less leisure-time PA. Alcohol use and PI correlated only at the age of 21 years. PA at the age of 28 years was associated with previous PA and weakly associated with smoking and alcohol use at the age of 21 years. The correlations were not significantly different between genders. Smoking prevalence was highest at the age of 21 years and alcohol use at the age of 28 years. The prevalence of leisure-time PA did not change much over time. Smoking and alcohol use correlated positively for each survey. Smoking correlated negatively with leisure-time PA. The best predictors for each health behavior were the same behaviors measured before, but smoking had the strongest level of continuity.	Smoking was associated with both alcohol use and PA on each survey and therefore has a central role among health behaviors. Smoking and alcohol use were particularly clearly related from adolescence to adulthood. Smoking behavior was the most constant behavior. Smoking and alcohol use in males have been found to be more common than in females	One limitation of the study was that they did not use any self-reported nicotine addiction measurements or nicotinine tests to validate smoking behavior.	Future studies should attend more to the factors that might influencep roblembehaviors.

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9.Poortinga, W	UK	2007	N = 11.617 from 16 to 64 yearsold	To explore the associations of PA with smoking and alcohol consumption. It examined whether these associations are due to people participating in organized sports (the sport hypothesis), and/or reflect the concentration of drinking and smoking in manual occupational groups (the occupation hypothesis).	Cross sectional study. Analysis Logistic Regression: Restricted Iterative Generalized Least Squares (RIGLS) method of parameter estimation.	Socio demographic. Sport participation. Alcohol use. Tobacco consumption.	Heavy drinking was more common among men and sports club members, but less common among older age groups. Sports club members and older age groups were less likely to smoke. Sports activity was positively associated with drinking. This association was somewhat reduced when controlling for sports club membership. Smoking was negatively associated with sports activity.	The results suggest that the sport hypothesis may partly help to explain the relationship between PA and alcohol consumption, as sports activity and heavy drinking were both more prevalent among sports club members. The occupation hypothesis seems to be the more likely explanation for the association between PA and smoking. This study has shown that it is important to distinguish between different types of PA.	This study used rather arbitrary cut-off points for sports and occupational activity. The limitations of using cross-sectional data.	

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
10.Mattila, V	Finland	2012	16,746 males (age 19 yearsold)	To examine the association between sports activity (intensity and type of sport) and the current use of snus (Swedish snuff), cigarette smoking, and the combined use of cigarettes and snus among young males in Finland.	Cross-sectional study Analysis: Logistic Regression	Daily/occasional use of snus, cigarette smoking, and dual use. Sports activity. Type of sport.	Over the study period (1999-2010), the prevalence of cigarette smoking decreased from 42% to 34%, while snus use increased from 5% to 12%, Those reporting regular competitive sports activity had an increased odds ratio for use of snus (OR 10.2; 95% CI: 7.8-13.5) and a decreased odds ratio for cigarette smoking (OR 0.2; 95% CI: 0.1-0.3) compared to those reporting no sports activity at all. Team sports, ice hockey, and weight training were positively associated the most with snus use. Ice hockey and other team sports were not associated with cigarette smoking (OR 1.0; 95% CI: 0.9-1.1 for ice hockey and OR 1.0; 95% CI: 0.9-1.1 for team sports).	The results show a clear association between snus use and intensity and type of training. Team sports were associated with increased use of snus and dual use. Sports requiring more individual performance and maximal oxygen intake were not associated with any tobacco product use.	Self-reported data cross-sectional study design. They couldn't assess the exact frequency of snus use or number of cigarettes smoked using the quest.	

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
11.Terry-McElrath, Y	USA	2011	45,000 8th-, 10th-, and 12th-grade students, surveyedeveryyearfrom 1991 to 2009.	To examine the relationships between secondary school student substance use and exercise in general and school athletic team participation, To examines such relationships over time.	Cross-sectional Analysis Multivariate models / Bivariate models	Past 2-week binge drinking and past 30-day alcohol, cigarette, smokeless tobacco, marijuana, and steroid use. Exercise participation. Athletic team participation.	Significant negative relationships continued to be observed between exercise and binge drinking among middle school students. Positive associations between athletic team participants from high school and binge drinking. Exercise and athletic team participation continued to associate significantly and negatively to cigarette smoking. For high school students, exercise and athletic team participation remained independently and significantly associated with lower levels of marijuana use.	Exercise was associated with lower prevalence of middle and high school use of several substances. In contrast, school athletic team participation had mixed results with substance use. Higher levels of athletic team participation were associated with higher levels of smokeless tobacco and alcohol but lower levels of cigarette and marijuana use for both middle and high school. Frequent exercise appears to be associated strongly with lowered levels of adolescent alcohol, tobacco, and marijuana use.	Self-reported measure. The single item general exercise measure did not incorpo-rate exercise intensity or duration. Team sports item did not account for parti-cipation in team sports outside of school environments or different types.	

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
12.Martinsen, M	Norwey	2014	602 athletes (from Norwegian Elite Sport High Schools) and 354 controls. (mean age 16.5 years old)	To examine cigarette smoking, use of snus, alcohol, and performance enhancing illicit drugs among adolescent elite athletes and controls, and possible gender and sport group differences.	Cross sectional study Analysis t-test. Chi Square Binary logistic regression	Alcohol Cigarrettes Snus Training and PA history.	More controls than athletes were smoking, using snus, and drinking alcohol. Competing in team sports was associated with use of snus [odds ratio = 2.8]. For controls, not participating in organized sport was a predictor for smoking (odds ratio = 4.9). Female athletes were more prone to drink alcohol than males (46.3% vs 31.0%, *P* <0.001). Use of snus was more common among athletes competing in team sports than in individual sports (21.3% vs 9.5%). There was no difference between the sport groups and use of alcohol. In contrast to the athletes, smoking was a strong predictor for both snus and alcohol use among the controls.	These findings suggest that the subculture of a particular sport might socialize athletes into use of drugs such as snus. The finding that controls involved in organized sport were less likely to smoke compared with those not involved with organized sport can be explained because coaches, athletic trainers, and older athletes are less likely to smoke, it has been speculated that athletes have more positive role models than non- athletes which may lower their risk of becoming smokers (Melnick et al., 2001).	Cross-sectional study. Most of the Norwegian Elite Sport High Schools have regulations on use of drugs. Another limitation is that we did not ask the athletes if their use of drugs changed during the season.	It is essential to continue and further develop sport-specific prevention programs against the use of recreational drugs and especially snus among both male and female athletes and non-athletes.

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13.Diehl, K	Germany	2014	1138 elite adolescent athletes (14-18 years old) mean age: 16.33	To analyze prevalence of substance use among elite athletes. To identify determinants related to these behaviors and to compare the prevalence with nonelite athletes.	Cross-sectional analysis Uni and bivariate analysis Logistic regression	Alcohol consumption Binge drinking Sport participation Smoking Marijuan	Females and males had similar lifetime prevalence for alcohol consumption (85.8% vs 85.7%). Concerning sport-specific characteristics, some differences between the types of sports, with the highest risk for technical sports. The highest rate of binge drinking was found among athletes who spent much time with friends not involved with sports (49.4%), Although alcohol consumption among elite adolescent athletes was higher than 80%, consumption was slightly lower than in the non-elite athletes. The number of daily cigarettes in current smokers was 2.1 _ 1.6 for elite athletes vs 7.8 _ 5.8 for nonelite athletes. Logistic regressions showed a higher risk in nonelite athletes to have ever consumed alcohol, to currently smoke, and to have consumed marijuana during the last 12 months.	Compared with non elite athletes, elite athletes showed less risky behavior except for binge drinking. They found a clear age effect for alcohol consumption in our logistic regressions. It became apparent that elite adolescent athletes, who are at the beginning of a successful sports career and therefore need to be healthy, engage in risky behavior	Cross sectional design	

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
14.Nerin, I	Spain	2004	406 university students Mean age: 22	To determine the prevalence of tobacco use among university students who participate in sports activities.	Cross-sectional study	Age, sex, tobacco use, cigarettes/day, prior history of physical exercise, awareness of the regulations concerning tobacco use in force on the university campus, opinion on the relationship between smoking and reduced physical performance, and desire to quit smoking.	The prevalence of smoking was 30.3%. The mean number of cigarettes smoked per day was 9.3 (6.1) for women, and 14.7 (7.4) for men; the differences were statistically significant. No significant differences were found with respect to the relationship between exercise and tobacco use. However, youth doing sport present lower percentages of tobacco use. A total of 98.8% of the subjects were of the opinion that smoking reduced physical performance, and 46.3% expressed a desire to quit.	The study found a less amount of frequency of smoking among those smokers practicing one sport. Youth are aware that smoking reduced physical performance. The practice of physical exercise during adolescence as part of a prevention program might interfere with the factors that lead young people to start smoking and thereby contribute to a reduction in the prevalence of tobacco use in the population as a whole.	Cross-Sectional study. No intensity, type of sport, frequency defined. Much more girls than boys in the sample.	

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15.Schuit, J	Netherlands	2002	16,789 men and women aged 20 to 59.	To evaluate the degree of clustering of common lifestyle risk factors in a general adult population and to define sub groups with elevated clustering.	Cross Sectional. Analysis: Clustering of two or more risk factors was studied on the basis of ratios of observed and expected prevalence of 1,2,3 and 4 simultaneously occurring risk habits.	Food Frequency PA (leisure time and work : low PA = ≤30 min of moderate to vigorous activity per day) Alcohol Cigarretes (≥ 1 cigarrette per month)	The strongest association was observed for alcohol and smoking OR: 2.38; Clustering of smoking and alcohol consumption was strongest among the young subjects (OR: 3.78). All risk factors were significantly associated with each other, except for excessive alcohol consumption and low physical activity ("overall" prevalence odds ratio (adjusted for age, gender, and education) was 1.04)	Excessive alcohol consumption was not associated with low PA. Both the inactive and active groups had a similar proportion of excessive drinkers. It cannot investigate if the proportion of excessive drinkers among the active subjects is due to drinking in canteens of sporting clubs. The findings suggest that common lifestyle risk factors cluster among adult subjects. The tendency for risk factors to aggregate has important implications for health promotion.	Cross Sectional study. No information about the location of drinking.	Promotion programs on subgroups with elevated clustering. Information on high-risk groups will help in planning future preventive strategies.

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
16.Wichstrom, T	Norway	2008	Survey of national sample of Norwegian high school students (aged 13–19 years) in 1992 (T1) followed-up in 1994 (T2), 1999 (T3) and 2006 (T4) (*n* = 3251)	To study whether participation in organized sports (and different type of sports) during adolescence predicts increased smoking of tobacco, alcohol intoxication and cannabis use from late adolescence to adulthood	Longitudinal Study	Tobacco Alcohol Sport part. And cofounders	More boys (56.5%) than girls (45.7%) were involved in sports. Sports participation predicted growth in alcohol intoxication (b = 0.16), tobacco use (b = 0.12) and cannabis use (b = 0.08). However, adjusting for gender and age rendered the association on tobacco and cannabis use. Boys had a stronger increase in alcohol intoxication and cannabis use than girls. Those in endurance sports had lower growth in alcohol intoxication (b = -0.06) and tobacco use (b = -0.10) compared to those in technical sports. Those who were in team sports, however, had increased growth in alcohol intox. (b = 0.06), but reduced growth in tobacco use (b = -0.09) and cannabis use (b = -0.11). At T3 and T4 those who were involved in sports at T1 were intoxicated more often than those who were not. Cannabis use, sports participation was associated with lower use at T1 and T2, but not at T3 and T4. Regarding tobacco, sports participators scored lower on all occasions. The characteristics of the sports have an impact on the growth in substance use.	Sports participation in adolescence and participation in team sports in particular, may increase the growth in alcohol intoxication during late adolescent and early adult years, whereas participation in team sports and endurance sports may reduce later increase in tobacco and cannabis use. Team sport participation fosters socialization into normative behaviour, which is getting drunk—but abstaining from illicit drugs.	The present study addressed participation in organized sports and not PA in general. The Norwegian scene differs in several respects from many other western countries The present study is still a correlational one.	

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17.Martens, M	USA	2006	Intercollegiate athletes	to examine (a) the prevalence rates and alcohol consumption among intercollegiate athletes; (b) the motivational factors and (c) considerations for conducting alcohol-related interventions with intercollegiate athletes.	Systematic review	Alcohol consumption Intercollegiate athletics.	Results from the studies suggest: - Although prevalence rates of alcohol use among athletes only slightly exceed those among non- athletes, heavy episodic drinking appears to be far more common among athletes. - Among athletes in particular, alcohol use appears to be associated with a host of negative health and social behaviors. - College athletes not only consume more than non-athletes but also embody a relationship between level of involvement and alcohol use.	Although 12-month prevalence rates may be similar between college athletes and nonathletes, athletes report consuming more drinks per week, are more likely to engage in heavy episodic drinking and experience more negative alcohol-related consequences than non-athletes. Theories explaining this: Sport-related pressure or anxiety, peer- or teammate-related influences, and cultura llinks between athletics and alcohol, might be related to excessive alcohol consumption (Leichliter et al., 1998;Marcello et al., 1989; Overman & Terry, 1991; Stainback,1997; Tricker, Cook, & McGuire, 1989). The risk factors for heavy alcohol use and alcohol-related problems identified in the general population (e.g., being male, belonging to a fraternity or sorority, having high levels of drinking motives) also apply to college athletes. The results from these studies indicated that among the relatively small proportion of athletes who do not use alcohol, health- and performance-related concerns were among the most endorsed reasons for not drinking.	Research on understanding why heavy drinking occurs disproportionately among college athletes is at best limited.	To explore sport-related demographic factors (e.g. sport type differences in alcohol use). To understand the reasons why athletes are particularly at risk for heavy alcohol use, exploring factors such as sport-specific drinking motives and the sociocultural link between alcohol and athletics.

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
18.Kwan, M	Canada	2014	Systematic Review of 17 longitudinal studies	To investigate the role that sport participation might play in preventing drug and alcohol use among youth.	Systematic review	Sport participation Alcohol use Cannabis Tobacco	Sport participation is associated with alcohol use, with 82% of the included studies showing a significant positive relationship. Sport participation, however, appears to be related to reduced illicit drug use, especially use of non-cannabis related drugs. Eighty percent of the studies found sport participation associated with decreased illicit drug use. Studies finding a positive effect for sport participation on marihuana use were focused largely on marijuana use during high school, whereas the studies that did not find a relationship assessed cannabis use while the participants were well into their 20s.	Participation in sports reduced the risk of overall illicit drug use, but particularly during high school; suggesting that this may be a critical period to reduce or prevent the use of drugs through sport. There is some evidence that the strength of the relationship between alcohol and sport may in part be influenced by the timeframe in which sport participation was measured, the potential modifying effects of socio-demographic factors, and the type of sport.	16 of 17(94%)of the longitudinal studies conducted in the US. The studies relied on self reported data. No standardized measures were used. Sport and PA are usually not included in the same study or analyses treated separately	The lack of longitudinal data. Lack of intervention-based studies. None of the studies in Our review analyzed psychosocial and/or behavior pathways that might explain how sport might be protective of alcohol and illicit drug use among youth.

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
19.Rodriguez, D	USA	2004	1089 adolescents from nine to eleven grade.	To assess the likelihood of smoking among adolescents with different patterns of team sport participation	Longitudinal study Four data Collection. Analysis General growth mixture modeling (GGMM) – mplus software.	Team Sport participation Smoking Alcohol Use Depressive symptoms PA Demographic (from youth risk behavior survey)	There was an overall increase in smoking from baseline to the eleventh grade, x2(4, N 5 1,089) 5 604.95, p , .0001. Overall team sport participation decreased significantly from grade 9 through 11. Adolescents with decreasing or erratic participation were nearly three times more likely than adolescents with high participation to be current smokers in eleventh grade. Nonwhites were at particular risk for decreasing and erratic patterns of participation, and later smoking. Females were at high risk for low team participation.	Findings support our hypothesis that adolescents with decreasing team sport participation are at increased risk of later smoking. Reason for non smoking among athletes: smoking may interfere with high performance. Like cigarettes, athletic performance provides stress reduction and may elevate mood. Athletes enjoy high social status and are thus less likely to smoke for status elevation. Smoking is not consistent with the athlete's identity. When quitting sport, new peers that can influence.	Significant covariates not analyzed in the study (e.g. SES). Only measuring team sport participation.	Future research should assess the effects of potential barriers to sport involvement, such as sport competence beliefs, the value of sport, and self-esteem, on team sport participation and smoking.

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
20. Ford, J	USA	2007	2.316 college and university students	to determine which sports are at the greatest risk for substance use.	Cross-sectional study	Sport participation Alcohol Tobacco Marihuana	For male athletes, both hockey (75.4%) and baseball (64.6%) athletes were more likely to report binge drinking. Soccer players (47.1%) and runners (40.9%) were less likely to report binge drinking. Hockey athletes were also more likely to report marijuana use (38.5%), whereas basketball athletes (19.1%) and runners (16.3%) reported lower levels. For other illicit drug use, basketball athletes (8.6%) and runners (10.1%) were less likely to report use. For female athletes, the findings clearly indicated that soccer athletes were the most likely to report substance use: 46.9% reported binge drinking, 37.8% reported marijuana use, and 23% reported other illicit drug use.	There is variation in substance use on the basis of sport/team affiliation.A possible explanation for this variation in substance use is social norms. For young adults, such as college students, peer norms and behavior are strong predictors of alcohol and other drug use.	Cross-sectional data.	future researchers should examine why certain groups of athletes have higher rates of substance use. To study the social norms involved in each sport.

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
21. Peck, S	USA	2008	1000 subjects from a state study, followed from 12-28 years old.	to examine how adolescents' alcohol use and sports activities are related both to childhood sport and problem behaviour and to heavy drinking in early adulthood.	Longitudinal analysis. National survey.	Alcohol Use Sport Participation.	Pattern-centered analyses revealed that the relation between adolescent sport activity and age 28 heavy alcohol use obtained primarily for sport participants who were also using more than the average amount of alcohol and other drugs at age 18. Similarly, children who were characterized by relatively high levels of sport participation, aggression and other problem behaviour at age 12 were more likely than expected by chance to become sport participants who used more than the average amount of alcohol and other drugs at age 18. The results indicated that members of the age 18 jock-only group were no more likely than expected by chance to report heavy drinking at age 28 [adjusted standardized residual (ASR) (ASRs are interpreted as *Z*-scores, e.g. ASR values above _1.96, 2.58, and 3.29 are significant at the two-tailed 0.05, 0.01, and 0.001 levels, respectively) = -1.5, $P < 0.20$] and were more likely than expected by chance to report getting drunk one or fewer times in the past 6 months (ASR = 1.7, one-tailed $P < 0.05$). The results also revealed that J-Alc-PB youth were likely to become age 28 heavy drinkers (ASR = 1.7, one-tailed $P < 0.05$) (jock-only) is marked by relatively high levels of sport activity; cluster II (J-Alc-PB) is marked by relatively high levels of sport activity, alcohol use and problem behavior; cluster I (J-Psoc) is marked by relatively high levels of sports and low levels of problem behavior; cluster II (J-PB) is marked by relatively high levels of sports and problem behavior; clúster III (J-Agg-PB) is marked primarily by relatively high levels of sports, aggression and problem behavior; and cluster IV (J-Alc) is marked by high levels of bringing alcohol to school along with relatively high levels of sports, aggression and problem behavior. 12 J-Psoc youth were likely to become age 18 jock-only youth (ASR = 2.4, one-tailed $P < 0.01$), and age 12 J-Agg-PB youth were likely to become age 18 J-drugs youth.	The results indicate that childhood problem behaviour and adolescent sport participation can, but do not necessarily, presage heavy drinking in adulthood and that pattern-centered analytical techniques are useful for revealing such theoretically generated predictions.The effects of childhood factors on drinking behavior in early adulthood are mediated primarily by factors associated with adolescent drinking behavior, and the pattern-centered (e.g. cluster) analyses reveal that sport activity is not necessarily associated with concurrent or subsequent drinking behavior.	Model misspecification. Type of sport.	

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
21. Amos, A	UK	2007	24 females and 22 males. 15- and 16-years old smokers.	To explore in more depth the gendered nature of the meaning and function of smoking for 15 and 16 years old boys and girls.	8 single-sex focus groups.	Social activities, smoking history, current smoking patterns, the role and meaning of smoking, positive and negative aspects of smoking, future intentions, perceptions of significant others' attitudes to smoking, gender and smoking.	The most notable gender difference in participants' social lives was that most boys played sport, and keeping fit was important to them, whereas few girls were interested in sport or involved to any major extent. Smoking was widely regarded as negatively affecting fitness, a view drawn mostly from their experience. Either with internal comparisons or external comparisons related to their levels of fitness when they had not smoked and/or had been more involved in competitive sports. Being a smoker could conflict with their desire to be fit and successful. In the discussions, participants used three different strategies to deal with this tension—denial, conditional acceptance and substitution. A minority denied or discounted the effect that smoking had on fitness, drawing on their own experience, arguing that training or 'innate' fitness could counteract any negative effects. However, the majority of male participants accepted, largely through their own experience, that smoking had affected their fitness. Several described how fitness concerns had motivated quit attempts in the past or would motivate future attempts. They described how recently their social activities and interests had changed and, in contrast to sport, smoking in these contexts was less problematic and even desirable. Little discussion about sport in the girls' groups. The few personal examples they gave related to nonsporting activities such as getting out of breath when climbing stairs or running for a bus, and were given less weight than boys' discussions around fitness.	Among boys, Smoking was perceived as having a positive role in their social lives and dealing with negative emotions, but most recognized it jeopardized their fitness. Sport motivates them to quit smoking.		Intervention programme which takes an holistic life-course approach to supporting young people through teenage transitions.

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
22. Thing, L	Denmark	2013	30 subjects from 15-17 years old.	To examine how risk discourses related to health and PA are used and understood by the young people in a Danish school setting.	Qualitative study. Focus groups interviews.	Health PA School life	Adolescents did not see alcohol consumption as a health risk factor. For these adolescents alcohol was a part of their everyday life and, in their view, supported their socialising. They felt that a physically active life involving sport could and should be integrated with school parties and drinking. Adolescents tended not to see success in sport as particularly rewarding or prestigious, but being a good party person was prestigious. They suggested there was kudos in being a good footballer at primary school; in secondary school, other cultural activities were more valued. The students argued that it was better to integrate the two cultures, for example, by organising a run in the park and then having a social event in the park with drink and music. Everyone drinks. If there was pressure for students to undertake more PA, then it would clash with the party culture. Students saw similarities between sports activity and drinking. Both activities were time consuming but stimulating. Both activities took time away from homework, but they were experienced as rewarding.	For these young people, the sports and partying (including alcohol consumption) cultures were not in conflict but were part of the same culture of optimism and components of their preferred lifestyle. Such findings indicate that future health messages About sports/PA for young people should focus on positive contributions to life rather than judgement, deprivation and asceticism and that health promotion should be considered in terms of an aesthetic interest in life.		

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
23. Meneses, C	Spain	2014	56 adolescents aged 14-18 years old.	To examine the significant differences in smoking, drug and alcohol use between adolescent boys and girls To raise the possible need to design and implement prevention programmes from a gender perspective.	8 discussion groups 6 semi-structured interviews.	Alcohol Tobacco Other substances	Reasons associated with the consumption and the patterns of consumption were perceived differently by each sex. To lose weight, calm down or an image of rebelliousness was related to girls who smoked, while boys smoked less because they participated in more sports Boys smoked less than girls and that this was related to boys' involvement in sport and PA, with this involvement being greater in boys than in girls. Participating in sport was seen as incompatible with smoking. *I think that there are many boys who stop smoking because of sport because they are keen on football or whatever, and if they smoke their physical condition gets worse; and girls, who do less sport, it doesn't matter to them as much. (GD3, girl)* *There are girls who smoke because it makes you thinner. (GD3, girl*	Differences between genders appear when looking for substance use.		

Autors	País	Any	Subjectes	Objectius	Metodologia	Variables mesurades	Resultats Principals	Conclusions	Limitacions de l'estudi	Estudis futurs
24. Kelly, S., et al.	U.S.A	2010	404 students from two High Schools. 13 to 18 Y.O.	To assess the relationships among cognitive variables, social support, and healthy lifestyle behaviors in adolescents.	Descriptive correlational design, using Pearson's *r* correlations. Framework based on Cognitive Behavioral Theory.	**Healthy Lifestyles:** - 16 item belief scale instrument that taps beliefs/ confidence about various facets of maintaining a healthy lifestyle. **Healthy lifestyle perceived difficulty:** - Scale - 10-item question that measures one's perceived difficulty in living a healthy lifestyle. **Healthy lifestyle choices scale:** - 16 items instrument that taps intentions to engage in healthy lifestyle behaviors, including nutrition, exercise, and goal setting **Healthy lifestyle attitude scale: -** 14 items instrument that taps attitudes toward living a healthy lifestyle. **Social support and Family:** **-** Using Sub-Scales. Each sub-scale has four questions and is scored on a 5-point scale ranging from ''Never'' to ''Every day'' **Behavioral skills:** -PA and fruit and vegetable intake – 2 scales going from never to many times.	**Overweight and obese:** -There are a 30.33% of adolescents having a BMIP≥85 among the sample. -In one of the high schools 43.6% of the boys and 32.6% of girls have a BMIP≥85. **Healthy lifestyle:** - Beliefs about healthy lifestyles in the adolescents were significantly related to their attitude, choices, social support, and behavioral skills in living a healthy lifestyle: -Healthy attitudes, r = 0.52 -Healthy choices, r = 0.54 -Perceived difficulty, r= -0.49 Social support—family, r= 0.26 Social Support—friends, r= 0.20 Physical Activity, r= 0.46 Fruits/vegetables, r =0.21 -Perceived difficulty is significantly negatively (r= -0.49) because if a person viewed living a healthy lifestyle as difficult has problems to choose healthy lifestyles.	-The stronger an adolescent belief about the ability to live a healthy lifestyle, the higher his or her attitudes, social support, and behavioral skills in living a healthy lifestyle. -Cognitive beliefs about leading a healthy lifestyle, including attitudes and intended choices, are related to PA as well as healthy food intake. - Social support from family and friends also was related to healthy lifestyle beliefs and perceived difficulty in leading a healthy lifestyle. -Social support from family and friends was related to healthy lifestyle beliefs. -The findings from this study support cognitive behavior theory.	It was a convenience sample. The majority of the sample was white.	-Interventions in teens have not had more long-term positive sustainable effects. -Testing programs such as the *COPE/Healthy Lifestyles TEEN Program* that utilize cognitive skills for the promotion of healthy lifestyle behaviors are urgently needed to determine if these can lead to shorter and long-term positive changes in adolescent healthy lifestyle behaviors. -More studies are needed to asses teens from a more ethnically and socioeconomically diverse group. -Is important to implement strategies to strengthen their cognitive beliefs about their ability to make healthy choices and engage in healthy lifestyle behaviors.

Autors	País	Any	Subjectes	Objectius	Metodologia	Variables mesurades	Resultats Principals	Conclusions	Limitacions de l'estudi	Estudis futurs
25. Gil Madrona, P. Et al.	Espanya	2010	1090 joves entre 18 i 24 anys. Universitaris i no universitaris.	Analitzar els hàbits d'AF i alimentaris, i el consum de substàncies perjudicials per la salut en la població juvenil. Descobrir si hi ha similituds entre joves universi-taris i no universi-taris.	Estudi transversal realitzat a partir d'enquestes i qüestionaris mixtes.	**AF** -Pràctica o no d'un esport, freqüència, afiliació a un club esportiu i motius de la pràctica esportiva. **Estils de vida** Si són fumadors, si consumeixen begudes alcohòliques, si consumeixen o han consumit drogues i la seva opinió sobre el tipus d'alimentació que mantenen.	**AF** S'observa un lleuger augment de la pràctica esportiva durant el transcurs de la carrera de magisteri (44% a 1er i 51% a 3r), tot i que disminueix l'afiliació a un club esportiu. El % d'AF varien segons la carrera. Estuiants de medicina tenen el % més baix (30%), mentre que els de dret tenen el més alt (60%). Els no universitaris tenen un 50% de nivells d'AF. Els motius principals per la pràctica d'AF són: vida social, salut i benestar entre els homes i benestar, bellesa, salut i diversió enre les noies. **Alimentació** Al voltant del 70% dels enquestats creuen que la seva alimentació és sana i equilibrada. **Tabac** El 60% dels estudiants de medicina diuen ser fumadors, i tan sols el 18% dels no universitaris es declaren fumadors. A magisteri el 35% són fumadors. **Alcohol** El 35% dels estudiants de MEF de 1er consumeixen alcohol el cap de setmana. Aquesta xifra es dispara fins el 90% a 3r. Augments semblants passen en altres carreres. **Altres drogues** Un 40% dels enquestats afirmen consumir cannabis.	Existeix xifres molt elevada de consum d'alcohol durant els caps de setmana. Els estudiants de medicina no tenen consciència dels beneficis que l'AF dóna a la salut. La pràctica esportiva es relaciona amb millors comportament s saludables en la majoria dels joves enquestats, i per tan té una relació directe amb el consum d'alcohol i tabac.		S'han de tenir més en compte les actuacions preventives de les administracions públiques i educatives.

2.2 Fruit and vegetable consumption and sport participation

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
1.Nelson, T	USA	2011	Systematic Review	To find if sport participation prevents obesity among youth.	19 studies reviewed	Sport participation. Weight status- PA levels. Diet.	Sport participants are more physically active. Youth involved in sport were more likely to consume fruit, vegetables and milk, and also more likely to eat fast food and drink sugar-sweetened beverages and consume more calories overall.	The existing research suggests that youth in sport are more likely to consume greater amounts of calories and consume some unhealthy foods and beverages. It is unclear if sports program, as currently offered, protect youth from becoming overweight or obese.	Small sample size in the studies. Use a BMI of an outcome measure. Use of cross-sectional designs. Self-reported measures of diet. Type of sports not included	Additional research may foster understanding about how sport, and youth sport settings, can help promote energy balance and healthy body weight. Longitudinal studies are needed.

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
2.Dodd, L	UK	2010	410 students from UK universities . Mean age: 23.2 years old.	To investigate the prevalence and clustering of five lifestyle risk factors within a UK Higher Education (HE)	Cross sectional study. Analysis: The two-step cluster analysis procedure Chi Square ANOVA MANOVA	Psychological stress, PA, fruit and vegetable intake, binge drinking, smoking, and demographic factors	Data on the whole sample revealed that the prevalence of three lifestyle risk factors were high; 70% did not meet the recommended guidelines of PA, 66% ate less than the recommended servings of fruit and vegetables per day, and 56%reported binge drinking at least once in a seven-day period. Cluster 1 (unhealthy/ high risk group) Cluster 2 (moderately healthy/moderate risk group) Cluster 3 (healthy/low riskgroup). There was a significant association between clusters 1 and 3 and gender ($\chi^2(1)=5.649$, pb0.05, phi= −.132), with a higher percentage of females (61.5%) in cluster 1 and a higher percentage of males (54.2%) in cluster 3. Significant differences between cluster 2 and 1 on PA and binge drinking, with cluster 2 demonstrating greater PA and binge drinking behavior.	The analysis clearly demonstrates patterns between behaviors. Greater perceived psychological stress was related to less frequent PA behavior and less fruit and vegetable intake. The cluster analysis did not reveal low PA to be related to excessive alcohol consumption. Infact, cluster 2 was characterised by moderate PA behaviour with more than two binge drinking episodes in a seven-day period. Health behaviors should not be considered in isolation from one another.	A convenience sample was selected, which is associated with selection bias. Self-reports of the behavior may be subject to social desirability bias, thus the findings may be underestimated. Cross sectional analysis.	Interven-tions based on educat-ional approaches could be effective in this context.

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
3.Taliaferro	USA	2010	First year: 7445 males and 7828 females. Last year: 14,041 participants.	To examine the relationships by year between sport participation and health risk behaviors among high school students.	Longitudinal study. From 1999 to 2007 every 2 years. Analysis Multiple Logistic Regression (Interaction effects tested whether relationships varied by year, sex, age, and/or race/ethnicity)	sport participation, vigorous PA, dietary habits, weight loss, sexual activity, interpersonal violence and suicidality, and substance use.	For males, the relationship between sport participation and increased fruit consumption remained consistent across years and race/ethnicity. However, small, but statistically significant differences emerged in the relationship between sport participation and vegetable consumption among males across racial/ethnic groups by year. White male athletes reported greater vegetable consumption than nonathletes. White female athletes were more likely than nonathletes to consume fruitand vegetables. Male athletes were more likely to use alcohol. White male athletes were less likely to use marijuana and cocaine than nonathletes. White female athletes reported less cigarette smoking, marijuana use, cocaine use, and steroid use than nonathletes.	Participation in sport affords many health benefits to most adolescents, but relates to some negative health behaviors in certain subgroups.	Due to the cross-sectional nature of the survey, causation cannot be determined. Self reported data. Inability to evaluate potential differential effects across various forms of sport.	

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
4.McAloney, K	UK	2014	3914 youth. Mean age 12.5 years old	To examine the prevalence and clustering of meeting fruit and veg recommendations among 10- to 15-year old.	Cross sectional study from a national representative survey. Analysis: Clustering Logistic Regression	Fruit and vegetables Sport participation and PA. Socio demographic measures: SES and ethnicity.	Around one-third of boys (35.8 %) and one-fifth of girls (21.8 %) met the government recommendation for PA. 13.6 of boys and 16.1 of girls met the fruit and veg recommendations. The majority of boys (57.2 %) and girls (67.3 %) met neither recommendation. There was strong evidence of clustering in meeting the recommendations for both behaviours; the observed/expected ratio was 1.36 (95 % CI: 1.13–1.59) for boys and 1.47 (95 % CI: 1.19–1.76) for girls. Increasing age was associated with a lower likelihood of meeting both recommendations for both boys and girls. Compared to white young people, Pakistani and Bangladeshi boys and girls were significantly less likely to meet both recommendations.	The two health behaviours clustered. The combined prevalence of meeting the two recommendations was, respectively, 1.36 (boys) and 1.47 (girls) higher than would be expected if the two behaviours occurred independently. Meeting both recommendations was more frequently reported by younger adolescents and less likely among Pakistani and Bangladeshi youth.	It limits to collect reliable household level Data. Restricted measurement of F&V consumption and PA (the question on PA did not specify intensity or duration).	

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
5.Due	UK	2011	Systematic review	To present a model that encompasses pathways and mechanisms working over adolescence that contributes to adult health inequalities.	Systematic review	Health behaviour pathway: PA Smoking Fruit and Veg Alcohol	**PA**: Over the period of adolescence, children are likely to become less active with age and to spend more time on sedentary behaviours. Most studies show moderate tracking of PA from adolescence into adulthood. The findings suggest that inactive adolescents, especially boys, continue to be inactive later. **Fruit and veg**. Less than 50% of adolescents in Europe and North America eat fruit daily, and internationally, fruit and vegetable intake among adolescents is far below recommended levels. Food choice in adolescence, including fruit and vegetable consumption, influences later food choice patterns. **Smoking:** In the USA, almost 90% of adult smokers had tried their first cigarette before the age of 18, with a peak age of 12–14 years, and 71% of adult daily smokers become regular smoker by 18 years of age (United health depart, 1994). **Alcohol**: Alcohol use and excessive drinking track from adolescence into adulthood. A Danish longitudinal study suggests that social patterning evolve in the latest part of adolescence (Andersen, 2008).	Adolescent health behaviors track into adulthood. While some studies indicate weak or moderate tracking of PA and dietary intake from adolescence to adulthood, most studies find strong tracking of both smoking and alcohol behaviours. Also, for both PI and smoking there are suggestions from the literature of socially differential tracking, leaving children from lower SES backgrounds at higher risk of continued adverse behaviour into adulthood.	Studies missing. Reviews may be biased by the original authors.	Lack of research and evidence in how social patterns of health, health behaviours, and social relations in adolescence transfer into adulthood and to what extent they reflect themselves in adult health inequalities.

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
6. Kubik, M	USA	2005	36 girls and 34 boys aged 15-19 years old.	To increase understanding of factors that may influence the dietary and PA practices of adolescents attending an alternative high school (AHS).	Qualitative design. Focus groups.	PA Dietary	Several felt they ate healthier if adults at school and home provided healthy foods and encouraged their consumption. Many said they would purchase fruits and vegetables, and water, milk, and fruit juice at school if these items were available in school vending machines. For a few, mostly girls, health concerns influenced their eating habits. Some students reported eating better when they were exercising or participating in sports. "You don't have somebody by your side, like a football player would, saying 'eat this, eat that.' So it's kind of hard. So it depends what you're into and who's encouraging you" (male Student) "Once you start exercising and eating healthy, it sticks with you, you know, it's really hard to break that habit." (male Student)	The majority of the adolescents interviewed do not see clear associations between dietary patterns and health, and neither the association between dietary patterns and PA.	The sample population was diverse in terms of gender, age, race/ethnicity, and urban/suburban school locale. Students response influenced by social desirability. Mixed-gender group discussion.	

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
7. Walsh, J	USA	2009	47 men. Mean age= 20.3 ± 1.7 years.	To explore how young men view weight maintenance in the context of these aspects.	Mixed-methods. Questionn-aires and focus groups.	Diet PA Body perceptions	Motivators to eat healthfully: the immediacy of sports performance, self-esteem, attractiveness, impacting girls, and being oriented toward long-term health. One participant stated: "I would say I'm not really motivated to stay healthy directly, but I am motivated to succeed in track and cross country and in order to do that I must be healthy." PA motivators: fitness, self-esteem/feel better, current/future health, self-rewarding, and to relax.	Motivators (sports performance/fitness, self-esteem, attractiveness, long-term health) were similar for eating healthfully and being physically active. However, more motivators to be physically active than to eat healthfully emerged.	Findings from more online focus group studies are needed to help standardize this methodology.	

Autors	País	Any	Subjectes	Objectius	Metodologia	Variables mesurades	Resultats Principals	Conclusions	Limitacions de l'estudi	Estudis futurs
9. Sánchez-Villegas, A., et al.	Spain	2003	3847 (1587 men and 2260 women). University students.	To identify the eating patterns of the subjects. To examine the factors associated with the adherence to the assessed eating patterns.	A cross-sectional analysis of the SUN (Seguimiento Universidad de Navarra) prospective cohort, based on self-reported quest.	**Dietary exposures** -Semi quantitative food frequency quest. **Non dietary exposures** -Self administrated quest. **Anthropometric characteristics:** BMI, weight and Height. **Smoking status:** Quest. **PA:** METs-h/week **Health related degree:** -Subjects Studying Medicine, nursing or pharmacy. **Marital Status** -Married or not.	**Eating patterns** 2 patterns were found labeled as 'Western' dietary pattern (WDP) (Fast food, fries, high fat dietary products, processed meals and red meat) and 'Spanish-Mediterranean' dietary pattern (SMDP) (Vegetable, fish, fruit, poultry, olive oil, legumes, nuts and potatoes). **Factors associated with eating patterns** -Men more likely to follow the WDP (Between 64% and 21%). - Younger people, smokers (≥20 cigarettes), and with higher BMI, more likely to follow WDP (b=+0.73) -Ex smokers (b= -0.12), those with previous story of obesity (b=-0.21) and those with a history (b=-0.53) of diabetes (b= +0.8) had lower adherence to WDP.. -For women more educational level mean higher adherence to WDP (b= + 0.03 for each year of education, p=0.01). - The most important factors positively associated with the adherence to a SMDP were PA during leisure time (b=o.o7 for men and b=0.05 for women) and having health related professions (b=+0.19 for Men and b=+0.05 for Female). -Single, widowed and divorced men tended to choose WDP item more frequently than married ones.	-Younger participants were more likely to follow the WDP. - High WDP for highly educated women can be explained for highly demanding activities which can influence on their diet. -PA during leisure time was positively associated with adherence to an SMDP. -Ex-smoker women are probably more likely to make positive decisions concerning their health - Some of the postulated benefits of SMDP can be also due to an overall healthier lifestyle. - Our results suggest that the younger, sedentary, more educated and single subjects are more likely to give up the traditional Mediterranean pattern in Spain.	-They did not use a random sample. -All the subjects were highky educated. -It can not be considered a representative sample for Spain.	To tailor interventions to specific target groups.

3. Sport participation and sedentary behaviour.

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
1.Rey-López, J. Et al.	Europe	2010	3278 adolescents (1537 males and 1741 females, 12.5–17.5 years)	To describe sedentary behaviour among adolescents. To examine the influence of media availability on TV viewing.	Self-reported sedentary behaviour question-naire. Analysis: Pearson Chi square Binary logistic regression.	Sedentary behaviors.	**≥15 years:** A higher percentage of males watched TV for N2 h/day compared with females (58.3% vs 52.8%). Males played electronic games more than females The percentage of using internet for non-study reasons were higher in females during only in the younger group. The use of internet for academic reasons was slightly lower in males aged ≥15 years. The reported time studying was higher in females during both weekdays and weekend (in the two age-groups).Time spent in sedentary behaviors was higher during weekends. During weekdays, 1/3 exceeded the screen time, whereas around 60% exceeded it at weekends. Having a TV or a console in the bedroom was associated with higher TV viewing(2.66)	Adolescents reported more time connected for non study reasons. Females surfed more than males, but only in those under 15 years and due to non-academic chores. The majority of adolescents living in Europe are not meeting media recommendations (especially during weekend days), Based on the AAP recommendations for media time (≤2 h/day),	A cross-sectional study, thus, we cannot determin e the direction of our findings. A self-reported sedentary behavior questionn aire was used.	

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
2. Nelson, M. Et al.	U.S.A	2006	N =11957. (male: *n* _5978, female: *n* _5979). Grades 7 to 12. (12-17 Y.O).	To examine relationships between PA and sedentary behavior patterns and an array of risk behaviors, including leading causes of adolescent morbidity/ mortality.	The National Longitudinal Study of Adolescent Health (Add Health). Given in two Waves.	**PA and Sedentary Behavior** : – 7 day recall quest. Measured with METs. **PA and sedentary behavior clusters:** - 7 clusters same as *Nelson*, 2005. **Adolescent risk behavior:** **-** Self-reported survey questions. Measuring: absence, cigarette smoking, sexual intercourse, delinquency. **Self-esteem :** - Rosenberg Self-Esteem Inventory. **Other Behaviors:** **-** Work, school grades and sleep – Quest. **Household composition, nationality and ethnicity:** - Parent/ adolescent in-home surveys	**Behavior Clusters:** -Clusters predicted a range of risk behaviors: - Adolescents who practiced sport with their parents were less likely (r = 0.53) to use drugs. - Adolescents who reported few activities were more likely (r = 1.34) to consume alcohol and smoke (r=0.96). - Teens using recreation centers are more likely to engage in violence (r=1.06). **Self esteem** -Females were more likely than males to have low self-esteem (LSE)(r=0.60 vs. r=0.51). -LSE (r=0.74) teens playing sports with parents. Whereas LSE (r=1.00) teens who report few activities, and limited TV decisions (r=0.96). **PA and weekly activities:** **-**Skaters were more likely to do the housework (r=1.53) and sleep ≥8 hours per night (r=1.11). -Teens who played sports with parents were more likely to have good grades (r=1.23). - Actives in school are more likely to do the housework (r=1.29). - The ones who reported few activities were less likely to sleep ≥8h (r=0.92) **5 bouts per week MVPA** Those who achieved were less likely to have sexual intercourse, (r=0.95) smoke, (r=0.78) get drunk frequently(r=0.84) or drive while drunk (r=0.72) use illegal drugs other than marijuana, (r=0.73) be truant, (r=0.76) or fail to wear a seatbelt (r=0.89).However, they were more likely to engage in violence (1.10).	- Participation in a range of PA-related behaviors was associated with favorable adolescent risk profiles. - Adolescents characterized by sedentary behaviors were more likely to engage in other negative risk behaviors. -PA in teens is tied to behavioral and social processes "Alternative" activities such skating/gaming activity patterns are associated with very high levels of PA in adolescence.	-The use of self-reported behavioral measures in the analyses. -The changing culture of adolescence and challenges to PA that have grown in the decade since the data collected (1994). -The Sample was not truly national representative.	-Little research has examined patterns of activity-related behaviors. -It is necessary a more in-depth analyses of the patterning and co-occurrence of health behaviors. -To analyze the extent to which external factors (eg, school and/or family environments) support active and healthful lifestyles patterns in adolescence is important.

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
3. Olds, T.	Australia	2009	6024 Australians aged 10 to 18 Y.O	To describe age- and gender-related patterns in the self-reported use of time on school days.	Computerized activity diary. Multimedia Activity Recall for Children and Adolescents (MARCA).	-Physical Activity Levels (PAL) and MVPA. -Organized sport Vs free play. -Screen levels. -Activs/Passive transport.	- Boys reported higher PA levels and sports than girls. -Organized sport/play made up close to 50% of all MVPA (51% for boys, 45% for girls), and free play about 20%. -There were no differences in free play. Free play and organized sport decreased rapidly with age. At age 10, 50% of MVPA was organized sport/play and 26% free play. By age 17, these figures were 37% and 8%, respectively. -Fewer than 10% of 17-year-old girls were active at lunch time, almost 80% of 10-year-old boys were). - PAL declined at the rate of about 2.5% per year of age. MVPA declined at the rate of 13–17 min · day_1 per year of age. -Girls used more active transport but the differences were slight (about 5 min · day_1). -All activity-related variables decreased with age, except active transport, which peaked at 14–15 years and then rapidly decreased. -Boys exhibited higher levels of screen time, whereas girls had higher levels of passive transport. -Screen time, television time, and computer time tended to peak at around 12–14 years, declining fairly rapidly thereafter. - Homework increases from 14 min · day_1 at age 10 to 33 min · day_1 at age 17. The time spent sitting or standing and talking, including talking on the phone, increased from 38 min · day_1 at age 10 to 80 min · day_1 at age 17.	-As children get older, a much smaller proportion of MVPA is derived from free play. Our data suggest that much of this decrease results from lower participation in MVPA during school hours. -As children get older, television plays a lesser role, and computer time a greater role. - Active transport plateaued at age 14, when most young people have access to bicycles and may be given road autonomy by their parents, Nonscreen sedentary behaviors (less active school classes, talking with friends, “hanging out,” reading) rise from about 2 hours per day at age 12 to over 9 hours per day at age 17. -Screen time may not be an ideal surrogate for all sedentary behaviors.	- The sample is not national representative -The data are not sampled evenly across days of the week and months of the year. -Nonschool days have not been covered in this study.	An analysis of the distributional characteristics of children’s use of time, stratified by day type, would complement this study.

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4. Utter, J. Et al.	U.S.A	2003	4,480 americans. Mean age 14.9 years. (13 to 18 Y.O)	To describe demographic characteristics of adolescent boys and girls who engage in three sedentary behaviors (television/video use, computer use, and reading/ homework) To explore how each sedentary activity is associated with BMI, dietary behaviors, and leisure time PA.	School-based survey.	-Sedentary behaviours. (self-administrated Quest.) - Dietary Variables. (Youth Adolescents Questionnaire YAQ.) - BMI. (Height and Weight measurment). - P.A. (Leisure Time Exercise Quest). - Demographic variables. (Self report quest).	Boys spent significantly more time (2.8 hours per day) than girls (2.6 hours per day) with television/videos and computers while girls spent significantly more time than boys reading and doing homework. (2.35 Vs 1.92 hours per day). Boys reporting high TV use had a mean BMI of 23.3, while boys reporting low TV use had a mean BMI of 22.6. Among girls, those reporting high television use and high computer use had mean BMIs (23.8) nearly one unit higher than those reporting low use of the respective activities. Boys reporting high TV/video use consumed almost 400 kcal more per day than those in the low-use category. Similarly, girls reporting high computer use consumed more than 300 kcal more per day than girls reporting low use. In contrast, both boys and girls reporting high levels of time spent in reading/homework consumed significantly less percent of energy from fat than the low group. Boys in the average category of computer use and in the high category for reading/ homework expended more active energy than those in the low categories of the respective sedentary behavior. Among girls, those spending the most time with computers or reading/ homework reported significantly higher levels of PA than girls in the average and low categories for the respective sedentary activity.	PA was associated with computer use and time spent reading/doing homework. Boys and girls spent more time watching television/video than with computers or reading/doing homework. High TV/video use was associated with more unhealthful dietary behaviors among boys and girls, whereas those reporting inactivity due to reading/homework were more likely to report more healthful dietary behaviors. Computer use was positively associated with fruit and vegetable consumption and PA among girls. We did not find a significant relationship between television/video use and PA for either boys or girls. This may suggest that the role of television/videos in obesity may be through mediating consumption rather than energy expenditure.	The combination of sedentary behaviors in questions and limited variety of sedentary activity measures. The study design was cross-sectional, so the findings cannot be used to determine causal pathways. The study only applies to youth attending school.	The findings suggest that messages and advice regarding reducing time spent in sedentary activities should be targeted at watching television/videos instead of time spent reading, doing homework, or using a computer.

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5.Serrano-Sanchez, J	Spain	2011	3503 subjects (12-18 years old)	To determine whether screen-time is associated with a reduced level of MVPA in Spanish adolescents living in favourable environ-mental conditions.	Cross-sectional study. Analysis: Bi and Multi Logistic Regression	MVPA Screen Time	46% of girls and 26% of boys did not meet the MVPA recommendations. Boys who reported 4 hours a week or more to total screen-time showed a 64% (OR = 0.61) increased risk of failing to achieve the recommended adolescent MVPA level. For each one hour increase in total screen-time, the MVPA level fell by 7.5% (OR = 0.93) in boys. Results showed that participation in organized PA decreased the risk of excessive use of TV by 33% in both sexes and video games by 59% in boys (all p,0.05). Participation in organized PA and sports competitions were strongly associated with MVPA.	No single screen-related behaviour explained the reduction of MVPA in adolescents. However, the total time accumulated through several screen-related behaviours was negatively associated with MVPA level in boys. Participation in organized PA seems to counteract the negative impact of excessive time in front of screens. Achieving a sufficient level of MVPA was twice as high for boys and girls participating in organized PA.	Cross-sectional design. Self-administrated quest. Strength: sedentary screen-based activities was based on quest. which have the advantage of analysing separately the different screen-related behaviors (e.g., TV, computer use).	it may be advisable to implement policies aiming at increasing the participation in organized PA, like sports.

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6. Ruiz, J	Europe	2011	2.200 European teens (12.5 to 17.5 years old).	To characterize levels of objectively measured PA and sedentary time in adolescents from 9 European countries.	Accelerome-ters.	MVPA Time spent in sedentary behaviours. Cardiorespirat ory fitness	A higher proportion of boys (56.8% of boys vs. 27.5% of girls) met the PA recommendations. Adolescents spent most of the registered time in sedentary behaviours (9 hours/day). Sedentary time was higher in older adolescent boys and girls (2.3% and 1% per age group increase, respectively). Both average intensity and MVPA were higher in adolescents with high cardiorespiratory fitness, and sedentary time was lower in the high fitness group (-1.5% for both boys and girls). (Cardiorespiratory fitness is an important health marker, despite its strong genetic component, regular PA is one of the main determinants of fitness in adolescents.	The group of adolescents with a high level of cardiorespiratory fitness was also more physically active than the low-fitness group. Younger adolescents and those with high cardiorespiratory fitness spent less time in sedentary behaviours.	No definitive consensus about the cut-off point with which to assess MVPA and sed. Time using actiGraph The data was not collected after a few days of wearing the activity monitors.	

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7. Nelson, M	USA	2013	2516 subjects followed from 11-15 to 15-18 years old; and from 14-18 to 18-23 years old.	to investigate longitudinal and secular trends in PA and sedentary behaviour in a large, diverse cohort of adolescents.	Longitudinal study.	Self-reported weekly hours of MVPA, television/ video viewing, and leisure-time computer use.	Substantial changes in MVPA, particularly among girls (decreasing 5.9–4.9 hours/week from early to mid-adolescence and 5.1–3.5 hours/week from mid- to late adolescence), and leisure-time computer use, particularly among boys (increasing 11.4– 15.2 hours/week from early to mid-adolescence and 10.4–14.2 hours/week from mid- to late adolescence). Computer use also significantly increased among older girls during the transition from mid- to late adolescence (8.8-12.5 h/week).	These adolescents experienced unfavourable shifts in activity patterns, such as longitudinal decreases in MVPA, coupled with longitudinal increases in leisure-time computer use. Total sedentary time may be increasing via increases in leisure-time computer use, particularly among boys.	Self-reported measures Sample drawn from one geographic region from Midwest United States. They did not differ between computer use (educational, leisure...)	future work is needed to explore the extent to which computer use resembles television viewing as a characteristic of sedentary behaviour patterns.

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8. Feldman, D	Canada	2003	743 high school students (mean age=15.1 years old)	To determine whether there is a relationship between the time adolescents spend in PA and time they spend in different sedentary behaviours.	Cross-sectional study	PA, sedentary behaviour, musculoskeletal pain and psychosocial issues.	Time spent in productive sedentary behaviour (reading or doing homework and working on computers) was associated with increased PA (r=1.7). Time spent watching TV and playing videogames was not associated with decreased PA (r=1.1).	PA was not associated with watching TV or playing videogames, but was positively associated with productive sedentary behaviour. Certain teens are more capable of managing their time to include both PA and sedentary pursuits. Reducing TV viewing may not be enough with respect to increasing PA. Time management skills or motivational strategies may be necessary.	Cross-sectional study. Self-reported data.	Explore the ability of the students to manage their time. To analyse what characteristics are conducive to better time management.

Authors	Country	Year	Subjects	Objectives	Methods	Variables	Results	Conclusions	Limitat.	Future studies
9. Pearson, N	UK	2014	Systematic review using 163 papers. 85 papers including adolescents 12-18 years old.	To describe the association between sedentary behaviour and PA in young people (<18 years).	Systematic review	PA Sedentary behaviour	Negative association between sedentary behaviour and PA was observed (r = −0.108). Studies that recruited smaller samples (n < 100, r = −0.193) employed objective methods of measurement (objectively measured PA; r = −0.233) or were assessed to be of higher methodological quality (r = - 0.176) reported stronger associations, although effect sizes remained small. Among old adolescents the associations between sedentary behaviour and PA remained negative but very small (r= - 0.032)	The association between sedentary behaviour and PA in young people is negative, but small. Findings provide little support for the 'displacement hypothesis', which asserts that engagement in sedentary behaviours may displace PA in young people (Mutz, 1993). However, recent studies suggested that these behaviours should not be considered functional opposites. The complex interplay between sedentary and physically active behaviours should be considered in the development and evaluation of behaviour change interventions.	Not analysing different types of PA.	To find differences between different time of the week.

Authors	**Country**	**Year**	**Subjects**	**Objectives**	**Methods**	**Variables**	**Results**	**Conclusions**	**Limitat.**	**Future studies**
10. Fountaine, C	USA	2011	736 college students (mean age= 19.1 years old).	To assess if any evidence exists to suggest displacement between sedentary behaviours and PA in college students.	Cross-sectional study Analysis: Descriptive Chi-square ANOVA	Sedentary behaviour PA Stages of change	When categorized by activity level, a greater percentage of male students met recommended PA levels than did females (p<.001). Males reported significantly higher levels of overall ST (p=.004) and television viewing (p<.001), whereas females reported significantly higher levels of time spent engaged in homework (p<.001). When categorized by activity level, physically active students reported significantly fewer minutes of total ST than inactive students (p=.047). Active students reported significantly fewer minutes of screen time than inactive and insufficiently active students (*p*=0.047 and *p*=0.032, respectively).	Within a college population, television and PA are not competing behaviours in either gender. Regardless of gender or PA participation, when students were categorized according to their PA stage of change, there was no significant difference in the amount of television watched. Whereas television may not have any effect upon PA, evidence from this study suggests non-television related screen time, such as recreational computer use and video games, are associated with lower levels of PA.	Cross-sectional study. 90% of the responses are representative only for a weekday.	To use time diary or media log to record behaviours when they occur in real time rather than relying on recall.

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11. Costigan, S	Australia	2013	33 studies reviewd involving girls from 12 to 18 years old.	to investigate the association between recreational screen-based sedentary behaviour and the physical, behavioural, and psychosocial health indicators for adolescent girls.	Systematic review	PA screen time behaviour	The association between screen-based sedentary behaviour and PA/fitness was rated as negative (i.e., 60% of studies reported less PA/fitness). However, four studies found screen time to be associated with health benefits such as increased PA levels. A strong association was found for weight status: 88% of low risk of bias studies [n= 7/8] reported a positive association between screen-based sedentary behaviour and increasing weight status.	evidence examined in this review indicates screen time in adolescent girls is associated with weight status, energy intake, depression, and musculoskeletal pain independent of PA levels. Furthermore, a consistent inverse association between screen time and PA was found.	it did not consider the simultaneous use of screen-based activities (i.e., using the internet while also watching television) or the use of mobile phones for small screen recreation. Health indicators have not been equally represented in the literature	Additional longitudinal studies are needed. Differ between boys and girls.

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12. Melkevik, O	Different countries	2010	615 Adolescents from 11 to 15 years old.	to determine whether exceeding the suggested guidelines for screen-based sedentary behaviour is associated with reduced levels of physical activity	Cross-national survey.	MVPA Screen time	Exceeding 2 hrs of daily total screen-time was negatively associated with MVPA for both boys and girls (ES=-0.05 and ES= -0.20), and with VPA for girls (ES=-0.12). Gaming was associated with less MVPA and VPA for boys (ES=-0.20 and -0.10), and non-gaming computer use was associated with higher levels of VPA for both genders. Stronger negative associations between physical activity and screen-based sedentary behaviours were found in countries where mean levels of physical activity were relatively high. Stronger negative associations between screen-based sedentary behaviours and physical activity were generally found in countries where adolescents were more physically active. Mean national levels of physical activity were also found to have significant associations with the associations of the individual screen-based behaviours.	The current study has shown that spending more than 2 hrs daily in screen-based sedentary behaviours is not consistently associated with lower levels of PA across genders and geographical regions. On a national level, negative associations between PA and screen-based sedentary behaviours are less likely to be found in countries with relatively low levels of PA. Consequently, national guidelines for limiting children and adolescents time in screen-based sedentary behaviour may not be conducive to increasing levels of PA in all countries.	Cross-sectional design. Time periods used are not consistent.	The regional differen-ces identified in this study highlight the necessity of cross national studies, suggesting that conclusions based upon local or even nationally representative studies may not be universally generalizable.

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13. Gordon – Larsen , P.	U.S.A	2004	13. 030 subjects from 11 to 26 YO.	-To examine tendency, incidence reversal and maintenance in achieving five or more sessions MVPA* per week and ≤14 hours of TV and video viewing, computer playing, across the transition from adolescence to young adulthood. -To examine the ethnic variation in PA and TV and video viewing across the transition from adolescence to adulthood.	Longitudinal Study. National Health survey. Questions were given in two Waves. Wave I – 11-21 YO and Wave III – 18-26 YO. In-home surveys.	**PA** - PA behavior recall during last week – Calculation of frequency by METs. - Wave III- additional questions applicable to young adults. **Behavior** - Hours of TV, video, computer and video game over the past week. ≤14 hours or >14 hours of weekly screen time. **Maintenance of ≥5 sessions of MVPA and ≤14h of TV viewing** **Race/ethnicity, SES, parents education:**	**Tendency of PA** -52.3% of males, and 70.7% females, did not achieve the recommended amount of PA neither in adolescence or adulthood. **Maintenance of PA** -33% of adolescents who achieved PA recommend. Failed to achieve five or more sessions of MVPA per week as adults. **Ethnic and PA** - 78.2% of Hispanic and 79.1% of black females failed to achieve five or more bouts per week across both periods. - Hispanic (Odd Ratio: 1.49) and black females (Odd Ratio: 3.09) compared to white females, failed to achieve favorable activity patterns at adolescence and into adulthood **TV viewing incidence** -17.7% of males and 29.8% of females had a ≥ 14.4 hours of weekly screen time. **Maintenance:** - 17% of adolescents, who engaged in ≤14 hours of screen time per week, increased their screen time into adulthood. **Ethnic Differences** -Black males and females were more likely than white people to have high screen time hours during both adolescence and early adulthood (R : 1.50 for males. R: 2.00 for females).	-The vast majority of adolescents do not achieve five or more bouts of moderate PA per week, and they continue to fail to achieve this amount of activity as they become adults. -Considerable amount of population declines in PA patterns between adolescence and young adulthood. This decline is less accentuate in terms of sedentary behavior. -There is a significant difference between ethnics and levels of PA and sedentary behavior. - By the time individuals reach adolescence, most adolescents are already not engaging in enough PA and engaging in too much inactivity.	The ACSM recommendations are specified in terms of frequency and minutes of moderate activity, while the National recommendations data are characterized only by frequency.	The intervention efforts with such aims must begin prior to the adolescent period, particularly in certain ethnic groups like Hispanic and Black females.

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14.Nelson, M., et al.	U.S.A	2005	The final analysis sample (male: *n* _5978, female: *n* _5979). Grades 7 to 12. (12.18 YO*)	To identify meaningful patterns of adolescent PA and sedentary behaviors and its impact on long-term PA sustainability during adolescence to adulthood.	Longitudinal studies made on 3 waves: 1st 1994-1995. 2nd 1996 (adolescents who had not graduate) and 3rd 2001 – 2002. (Wave-III - added questions applicable to young adults.) The National Longitudinal Study of Adolescent Health(Add Health). In Home surveys.	**Daily PA** - 7 day recall quest.*. - Reports about participation in school PE* (days/week), school-based sports and academic clubs (nº/year). **Sedentary behavior:** - Reports about using neighborhood recreation centers, watching TV/videos and playing video or computer games (hours/week). **Cluster analysis to identify behavior patterns.** - 16 PA and sedentary behavior. **Household composition, nationality, and ethnicity.** -Parent and adolescents in-home surveys.	**Clusters identified:** -Seven robust clusters were identified: 1: high frequency of TV/video viewing and video gaming. They make their own decisions regarding TV viewing. 2: High frequency of skating, skateboarding, bicycling, and video gaming. 3: Play sports with parent(s). High frequency of overall sports participation. 4: Use of the neighborhood recreation centers. High frequency of overall sport participation. 5: TV viewing is limited by parents; participate in moderate amount of school PE. 6: Have control over TV viewing, but choose to watch very little; report few activities overall. 7. High participation in school activities, including team and individual sports, academic clubs, and PE. **PA incidence** - Absolute odds of meeting PA recommendations during adolescence were higher in clusters 2 (Odds Ratio (r= 13.1) 3 (r= 5.8), 4 (r= 4.2) and 7 (r= 4.3). **PA maintenance** - Predicted probabilities of cluster 2 meeting PA recommendations dropped 88% by adulthood. Meeting guidelines of PA also dropped significally in cluster 3 (r=5.84 to 2.58), 7 (r=4.34 to 2.35) and remained very low in cluster 1 (1.00 to 1.00)	-There are activity patterns that can be more sustainable over time. -Although cluster 2 had a big decreased between waves I, II and III the group remained active in young adulthood compared to other clusters. It is important to find strategis to reduce this drop out in cluster 2. -Simply restricting adolescent TV viewing may not be effective in increasing PA; cluster 5 has, after cluster 1, the least likely to have adequate PA and one of the highest screen viewing. - Practicing sports with their parents, going to recreation centers and being active in school are good patterns to achieve sustainable PA.	-The use of only self-reported measures in their Analyses. -Potential for selection bias due to their sampling and exclusion criteria. -Limited data they have to characterize types of PA and sedentary behaviors.	-More in-depth analyses of individuals maintaining recommended PA are needed. -Qualitative methods will be helpful in addressing motivation and coping mechanisms of individuals engaging in long-term, regular PA. -Is essential identifying and addressing specific barriers to continued PA. -Effective activity promotion strategies may focus on determinants initiating shifts toward more healthful, sustainable overall behavior patterns. -Evaluate multiple dimensions of activity.

Autors	País	Any	Subjectes	Objectius	Metodologia	Variables mesurades	Resultats Principals	Conclusions	Limitacions de l'estudi	Estudis futurs
15. Elizondo-Armendáriz, J., et al.	Espanya	2005	875 subjectes de 18 a 65 anys. (400 homes – 475 dones)	Descobrir la prevalença d'estils de vida sedentaris en la població adulta de Pamplona. Descobrir els factors que més influeixen en el sedenta-risme.	Estudi Transversal basat en qüestionaris autoadmi-nistrats	**Activitat Física (AF), sedentarisme, consum de tabac.** **-**Qüestionari de Paffenbarger. **Índex d'AF** **-**Kilocalories per setmana. **Mesures Antropo-mètriques:** -Pes i Talla + Index de Massa Corporal. **Factors que influeixen en els estils de vida sedentaris:** **-**Model de regressió logística múltiple no condicional.	**AF i sedentarisme:** -76.6% de les dones i 56.7% dels homes porten un estil de vida sedentari. -Els hàbits sedentaris s'incrementen amb l'edat. Grup de 18 a 34 anys (58.8% sedentaris) i de 35 a 54 (68%). **Factors de l'AF i el sedentarisme** **-**Un 73.4% dels homes i un 83.2% de les dones amb estudis de primària són sedentaris. - 67.3% d'universitàries sedentàries. -El 81.5% de les dones casades són sedentàries. -L'índex d'AF és superior en solters/es que en casats/es (2555.4 / 2087.7). -Els fumadors són més sedentaris que els que no fumen (60% / 48%). A més presenten una alta probabilitat de ser sedentaris (r=2.34).En les dones no hi ha diferència significativa. -Persones amb sobrepès i obesitat tenen més tendència a ser sedentaris que persones amb pes normal (75.8% / 62.9%). -Els homes casats (r=1.82) i de 55 a 65 anys (r=2.49) presenten majors probabilitats de patir sedentarisme. -Alta probabilitat (r=2.14) de tenir un estil de vida sedentari per aquelles noies sense estudis universitaris.	**-**Un elevat grup de subjectes son sedentaris i això s'accentua en determinats grups d'edat. -Els factors socio - demogràfics són bons determinants de l'AF. -El nivell educatiu i l'estat civil són bons determinant per predir els nivells d'AF.	-La pregunta per determinar l'AF, pot haver sobreestimat els nivells de sedentarisme. -El nombre total de subjectes repartits per edats era força baix (entre 60 i 170).	-Les dones sense estudis universitaris i els homes casats i fumadors són una població a tenir en compte alhora de fer promoció de l'AF.

Autors	País	Any	Subjectes	Objectius	Metod.	Variables mesurades	Resultats Principals	Conclusions	Limitacions de l'estudi	Estudis futurs
16. Roman Viñas, B. Et al.	Espanya	2006	3.185 individus de 2 a 24 anys. 1474 homes i 1711 dones.	-Fer un anàlisi descriptiu de la pràctica d'AF i el sedentarisme en el temps de lleure. - Analitzar els factors socio-econòmics que interfereixen en la pràctica d'AF.	Estudi epidemiològic, observacional i de disseny transversal. (Estudi enKid).	**Variables socio-econòmiques:** El Quest. Inclou: -Nivell socioeconòmic - Nivells d'estudis de la mare. -Grandària de la població de residència. **Hàbits de vida:** El Qüest. Inclou: -Hores de son. -Act. Extraescolars. -Hores dedicades a estudiar, jugar, llegir i escoltar música. **AF** Preguntes adaptades del Quest. CINDI i del quest. MARATHON. Incloent tipus i freqüència de la pràctica esportiva. **AF i sedentarisme en temps de lleure** Preguntes sobre: -Hores al dia mirant la TV i l'ordinador. -Hores al dia de pràctica esportiva. -Minuts de caminar en el temps de lleure.	**Pràctica d'AF i esport:** **-**Un alt percentatge de la població és inactiu (70%). **-**El nº d'hores/dia que es practica esport augmenta fins els 13 anys (0.73), però disminueix entre 14 i 17 (0.71) i encara més entre 18-24 (0.51). -El nº de min/dia que els joves caminen augmenta amb l'edat (14 a 17: 60.59 i de 18 a 24: 70.09). -La pràctica esportiva disminueix amb l'edat arribant a límits de 57.7% (homes) i 79.7% (dones) (entre 18 i 24 anys) que practiquen ≤2hores d'esport a la setmana. **Factors socioeconòmics** - Els subjectes caminen més si presenten nivells socioeconòmic baixos (64.09 Vs 54.09 Min/dia) i nivells baixos d'estudis materns (68.54 Vs 54.74). -El Nord-est d'Espanya és la zona que practica més AF (34% de la població). -En ciutats petites i pobles practiquen menys exercici que en ciutats grans (50% Vs 39%). -Nivells socioeconòmics alts indica més pràctica d'exercici tant en nois (40% vs 37%) com en noies (29% vs 16%). - 26% de les noies de mares amb estudis alts fan més de 2 dies d'exercici i el 17% de les noies de mares amb estudis baixos. **Sedentarisme** **-**Hores/dia de veure la TV o ordinador assoleix el pic entre 14 i 17 anys (2.21) i disminueix entre 18 i 24 (1.96). -Nivell socioeconòmic baix indica + hores de TV (1.69). -Nivell d'estudis materns baixos indica més hores de TV (1.76) però menys d'ordinador (0.23 Vs 0.30).	**-**Els nens i adolescents espanyols es passen més hores mirant la televisió que no pas fent esport. El nivell socioeconòmic i el nivell d'estudis matern influeixen en aquesta decisió. -En la prevalença de l'AF Espanya queda en els darrers llocs comparant resultats amb altres països Europeus. - L'evolució de l'AF amb l'edat mostra una progressió positiva fins al grup d'edat de 10 a 13 anys, i a partir d'aleshores es produeix un declivi clar en ambdós sexes, -Cal promoure uns hàbits d'AF en la infantesa i fer campanyes de manteniment i potenciació en les edats que es produeix l'abandonament -Tot i que les dades indiquen menys AF en poble i ciutats petites la veritat és que els qui viuen en poblacions més petites passen menys hores al dia en activitats sedentàries.	-El qüestionari emprat no especificava la velocitat en que els subjectes caminen, i caminar es considera una AF moderada sempre que la intensitat de la marxa sigui superior a la de passejar	-Malgrat que els qüestionaris d'AF solen sobrevalorar l'exercici que es fa, quan es comparen amb altres mètodes de mesurament més objectius, com són els podòmetres, acceleròmetres, etc., resulten molt útils per avaluar àmplies mostres en estudis epidemiològics. -És necessari desplegar programes interdisciplinaris de promoció de l'AF. -És interessant especificar el terme caminar i la velocitat necessària per ser considerat AF.

Appendix 2

Baseline estimation from AVENA study.

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Amb l'estimació (basada en l'estudi AVENA) d'un promig conjunt de canvi percentual d'homes i dones entre els 16 i els 18 anys

Diseño: Comparación de dos proporciones / Dos muestras relacionadas /No igualdad

Objetivo: Tamaño de Muestra

Parámetros

Parámetro	Valor
Nivel de Significación	5,00
Unilateral / Bilateral	55,00
Proporción Grupo de Referencia	47,00
Proporción Grupo Experimental	50,00
Proporción Pares Discordantes	50,00
Potencia	80,00
Porcentaje de abandonos	20,00

Resultados

Resultado	**Valor**
Tamaño de Muestra (número de parejas)	611
Tamaño de muestra a reclutar	764

Redactado

Para conseguir una potencia del 80,00% para detectar diferencias en el contraste de las relacionadas, teniendo en cuenta que el nivel de significación es del 5,00%, y asumiendo que la proporción en el grupo de Referencia es del 55,00%, la proporción en el grupo
Experimental es del 47,00% y la proporción de pares discordantes es del 50,00%, será necesario incluir 611 parejas de unidades experimentales en el estudio. Teniendo en cuenta que el porcentaje esperado de abandonos es del 20,00% sería necesario reclutar
764 parejas de unidades experimentales en el estudio.

Appendix 3

Survey used for the cross-sectional study (2011).

L’activitat física i els estils de vida en els adolescents d’Osona: programa per detectar l’adquisició d’hàbits saludables en l’adolescència.

Informació General

Bones! Som la Universitat de Vic i la Fundació d’Osona per la Recerca i l’Educació Sanitària. Et passem aquest qüestionari perquè ens agradaria saber quanta activitat física i quant esport fas en la teva vida diària. També et demanarem altres comportaments relacionats amb la salut, com fumar, beure alcohol i menjar fruites i verdures. L’estudi ens donarà informació sobre què podem fer per millorar la salut dels adolescents d’Osona.

Contestar el qüestionari

Aquest qüestionari recull informació sobre:

(a) informació personal (secció 1)
(b) dades sociodemogràfiques (secció 2)
(c) la teva activitat física habitual (secció 3)
(d) estils de vida: Alcohol, tabac i dieta (secció 4)
(e) barreres per la pràctica d’activitat física (secció 5)
(f) contacte (secció 6)

La teva participació és molt important per fer possible aquest estudi. Contesta les preguntes i **segueix les instruccions en cursiva.**

I recorda:

1. Les teves respostes no arribaran als teus pares o professors. El qüestionari és **anònim** i totalment **confidencial.**

2. No hi ha respostes bones o dolentes, això **NO** és un **examen**

3. Contesta les preguntes de la forma més **honesta** y **sincera** possible.

Moltes gràcies per la teva ajuda i participació!

UVIC Universitat de Vic
Facultat d'Educació

FORES

SECCIÓ 1: Informació personal

1. Quina és la teva data de naixement? *(Escriu la resposta)*

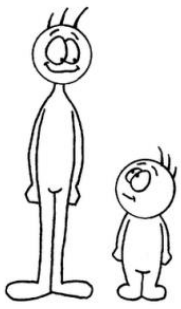
Dia:	**Mes:**	**Any:**

2. Sexe *(Marca la resposta amb una creu)*

Home	
Dona	

3. Estatura sense sabates *(Escriu la resposta)*

	Cm.



4. Pes (roba lleugera i sense sabates) *(Escriu la resposta)*

	Kg.

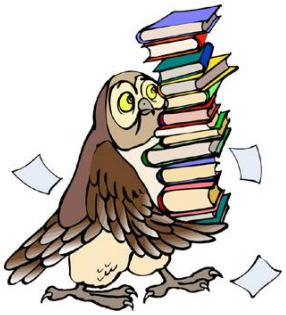
SECCIÓ 2: Dades Sociodemogràfiques

5. Quina nacionalitat tens? *(marca la resposta)*

Espanyola		
Espanyola i una altra estrangera		
Estrangera		Especifica país:

6. Quin és el nivell màxim d'estudis finalitzats del vostre pare i mare? *(marca la resposta)*

Nivell màxim d'estudi	**Pare**	**Mare**
No sap llegar ni escriure		
Primaris incomplerts: sap llegar i escriure sense haver finalitzat l'educació primària		
Primaris complerts: primària LOGSE completa o cinc cursos aprovats d'EGB		
Primera etapa d'educació secundària: graduat escolar, batxillerat elemental, EGB o ESO completa		
Ensenyaments de batxillerat: batxillerat superior, BUP, batxillerat pla nou, PREU o COU		
FP de grau mitjà: oficialía industrial, FPI, cicles formatius de grau mitjà.		
FP de grau superior: mestratge industrial, FPII, cicles formatius de grau superior.		
Ensenyaments universitaris de primer cicle: diplomatura universitària, arquitectura i enginyeria tècnica.		
Ensenyaments universitaris de segon cicle: llicenciatura, arquitectura i enginyeria.		
Estudis universitaris de doctorat, postgrau, màster, MIR o equivalent		
Una altra possibilitat (*especifiqueu-la):*		



7. Quina és la situació laboral principal actual dels vostres pares? *(marca la resposta)*

Situació laboral	**Pare**	**Mare**
Treballa		
Treballa, però té una baixa laboral de mes de 3 mesos		
Aturat/da amb subsidi/prestació		
Aturat/da sense subsidi/prestació		
Feines de la llar (mestressa de casa)		
Estudiant		
Incapacitat/da o amb invalidesa permanent		
Jubilat/da per raons d'edat		
Jubilat/da de forma anticipada		
Una altra situació (*especifiqueu-la):*		

8. Aproximadament, quins son els ingressos nets mensuals de la vostra família? *(Marqueu una sola resposta)*

No hi ha ingressos	
Menys de 300 €	
De 301 a 600 €	
De 601 a 900 €	
De 901 a 1.200 €	
De 1.201 a 1.500 €	
De 1.501 a 1.800 €	
De 1.801 a 3.000 €	
De 3.001 a 6.000 €	
De 6.001 a 9.000 €	
Més de 9.000 €	
No ho sap	

SECCIÓ 3: Activitat física

Volem saber quin és el teu nivell d'activitat física en els darrers 7 dies (última setmana). Això inclou totes les activitats físiques que et fan suar o sentir-te cansat, com **esports, gimnàstica o dansa**, o jocs que facin que se t'acceleri la respiració, com jugar a tocar i parar, saltar a corda, córrer, enfilar-te i altres.

9. Activitat física en el teu temps lliure: Has fet alguna d'aquestes activitats en els darrers 7 dies (última setmana)? Si la resposta és *sí*... Quantes vegades les has fet? *(Marca un sol espai per activitat)*

	NO	**1-2**	**3-4**	**5-6**	**7 o +**
Saltar a corda					
Patinar					
Jugar a jocs com tocar i parar					
Anar en bicicleta					
Caminar (com a exercici)					
Córrer / fer *footing*					
Aeròbic / *spinning*					
Natació					
Ballar / dansa					
Bàdminton					
Rugbi					
Anar en monopatí					
Futbol / futbol sala					
Voleibol					
Hoquei					
Bàsquet					
Esquiar					
Esports de raqueta					
Handbol					
Atletisme					
Musculació / peses					
Arts marcials (judo, karate...)					
Altres:					

10. En els darrers 7 dies, durant les classes d'educació física, quantes vegades has estat molt actiu durant les classes: jugant intensament, corrent, saltant, fent llançaments? *(Assenyala només una opció)*

No he fet / no faig educació física	
Gairebé mai	
Algunes vegades	
Sovint	
Sempre	

11. En els darrers 7 dies, què has fet normalment a l'hora de dinar (abans i després de menjar)? *(Assenyala només una opció)*

Estar assegut (parlar, llegir, treball de classe)	
Estar o passejar pels voltants	
Córrer o jugar una mica	
Córrer i jugar força	
Córrer i jugar intensament tota l'estona	

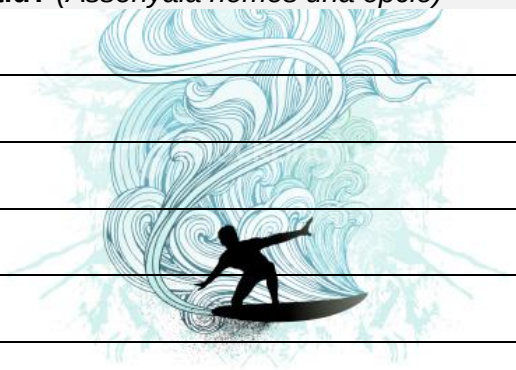
12. En els darrers 7 dies, immediatament després de l'escola, fins a les 6, quants dies has jugat a algun joc, has fet esport o balls en què estiguessis molt actiu? *(Assenyala només una opció)*

Cap	
1 vegada	
2-3 vegades	
4 vegades	
5 vegades o més	

13. En els darrers 7 dies, quantes vegades a partir de mitja tarda (entre les 6 i les 10) has fet esports, ball o has jugat a jocs en què estiguessis molt actiu? *(Assenyala només una opció)*

Cap	
1 vegada	
2-3 vegades	
4 vegades	
5 vegades o més	

14. L'últim cap de setmana, quantes vegades has fet esports, ball o has jugat a jocs en què estiguessis molt actiu? *(Assenyala només una opció)*



Cap	
1 vegada	
2-3 vegades	
4 vegades	
5 vegades o més	

15. Quina de les frases següents descriuen millor la darrera setmana? Llegeix-les totes cinc abans de decidir quina descriu millor la situació. *(Assenyala només una opció)*

Tot o la major part del temps lliure l'he dedicat a activitats que suposen poc esforç físic.	
Algunes vegades (1 o 2 vegades) he fet activitats físiques durant el temps lliure (per exemple, esports diversos, córrer, nedar, anar en bicicleta, aeròbic...).	
Sovint (3-4 vegades) he fet activitat física durant el temps lliure.	
Bastant sovint (5-6 vegades) he fet activitat física durant el temps lliure.	
Molt sovint (7 o més vegades) he fet activitat física durant el temps lliure.	

16. Assenyala amb quina freqüència has fet activitat física cada dia de la setmana (p. ex. esports diversos, jugar, ballar o qualsevol altra activitat física). *(Assenyala només una opció per dia)*

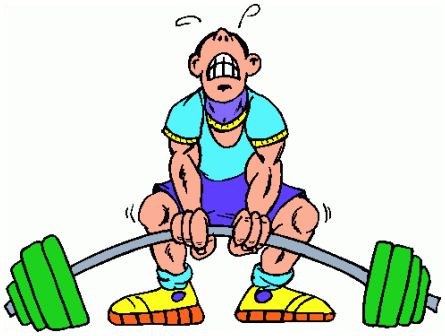
	Cap	**Poca**	**Normal**	**Bastant**	**Molta**
Dilluns					
Dimarts					
Dimecres					
Dijous					
Divendres					
Dissabte					
Diumenge					

17. Has estat malalt aquesta última setmana o alguna cosa ha impedit que fessis activitats físiques amb normalitat? *(Assenyala una opció)*

Sí	
No	

18. Quantes hores dediques a activitats esportives extraescolars a la setmana? *(Assenyala només una opció)*

0 hores	
1 hora	
2 hores	
3 hores	
4 hores	
5 o més hores	



19. En els últims 7 dies, quants dies has fet 60 o més minuts d'activitat física? *(Considerem activitat física qualsevol activitat que et fa incrementar el ritme cardíac i que fa que se t'acceleri la respiració. Es pot fer activitat física practicant esport, jugant amb amics o caminant a l'escola. Alguns exemples d'activitat física són córrer, caminar de manera vigorosa, anar en patins o monopatí, ballar, nedar, jugar a futbol, bàsquet, voleibol. No hi incloguis el temps que passes en les classes d'educació física escolar. Marcar només una opció.)*

0 dies	
1 dia	
2 dies	
3 dies	
4 dies	
5 dies	
6 dies	
7 o més dies	

20. **En una setmana normal Quants dies fas activitat física 60 minuts o més?** *(No incloguis el temps en les classes d'educació física escolar. Marcar només una)*

0 dies	
1 dia	
2 dies	
3 dies	
4 dies	
5 dies	
6 dies	
7 o més dies	

SECCIÓ 4: Estils de vida. Consum de tabac

Ara et faré preguntes sobre alguns comportaments relacionats amb la salut, com fumar, beure alcohol i menjar fruites i verdures. Comencem pel tabac.

21. Actualment fumes algun producte de tabac, com cigarretes, purs o pipes? *(Marca una opció)*

Sí.		
No.		Si no, salta a la pregunta 26.

22. Utilitzes productes de tabac diàriament? *(Marca una opció)*

Sí.		
No.		Si no, salta a la pregunta 26.

23. A quina edat vas començar a fumar cada dia? *(Indica l'edat)*

	Anys

24. Recordes quan temps fa que fumes cada dia? *(Marqueu només 1, no els 3)*

	Anys
	Mesos
	Setmanes

25. De mitjana, quants productes dels següents fumes cada dia? *(Emplena-ho per a cada tipus de producte)*

	Cigarrets
	Tabac de cargolar
	Pipa
	Puros
	Altres *(especifica'ls)*

SECCIÓ 4: Estils de vida. Consum d'alcohol

Les preguntes següents es centren en el consum d'alcohol.

Alcohol – Consum estàndard

1 botella estàndard de cervesa (285ml)

1 mesura simple d'alcohol per barreja (30ml)

1 got de vi (120ml)

1 vermut (60ml)

Nota: El contingut en un consum estàndard d'alcohol és de 10g d'etanol.

26. Alguna vegada has consumit alguna beguda alcohòlica com cervesa, vi, aiguardent, sidra, etc.? *(Marca una opció)*

Sí.		
No.		Si no, salta a la pregunta 34.

27. Has consumit alguna beguda alcohòlica els últims 12 mesos? *(Marca una opció)*

Sí.		
No.		Si no, salta a la pregunta 34.

28. Durant els últims 12 mesos, amb quina freqüència has pres almenys una beguda alcohòlica? *(Marca només una opció)*

Cada dia	
5-6 dies a la setmana	
1-4 dies a la setmana	
1-3 dies al mes	
Menys d'un cop al mes	

29. Has consumit alguna beguda alcohòlica els últims 30 dies? *(Marca una opció)*

Sí.		
No.		Si no, salta a la pregunta 34.

30. **Durant els últims 30 dies, quantes vegades has pres com a mínim una beguda alcohòlica?** *(Indica el nombre o senyala no ho sé)*

Nombre	
No ho sé	

31. **Durant els últims 30 dies, en les ocasions en què has pres begudes alcohòliques, quants consums estàndard has pres de mitjana cada vegada?** *(Indica el nombre o senyala no ho sé)*

Nombre	
No ho sé	

32. **Durant els últims 30 dies, quin ha estat el nombre més gran de consums alcohòlics estàndard que has pres en una sola ocasió, tenint en compte diferents tipus de begudes alcohòliques?** *(Indica el nombre més gran o senyala no ho sé)*

Nombre més gran	
No ho sé	

33. **Durant els últims 30 dies, quantes vegades has pres cinc o més (per als homes) o bé quatre o més (per a les dones) begudes alcohòliques estàndard en una sola ocasió?** *(Indica el nombre de vegades o senyala no ho sé)*

Nombre de vegades	
No ho sé	

SECCIÓ 4: Estils de vida. Dieta

Ara et faré preguntes sobre les fruites i les verdures que sols consumir. En aquesta pàgina trobareu una taula nutricional que mostra exemples de fruites i verdures de la terra. Cada imatge representa les dimensions d'una porció. Si us plau, quan responguis aquestes preguntes, intenta recordar el que consumeixes durant una setmana típica.

Racions típiques de fruita i verdura.

Son considerades VERDURES:	1 Ració =	Exemples
Verdures crues i de fulla verda.	1 got (80 grams)	Espinacs, enciam etc.
Altres verdures cuinades, picades o trossejades.	½ got	Tomàquets, pastanagues, carbassa, cebes, mongetes verdes, blat de moro, col etc. 
Suc de verdures	½ got	

Es considera FRUITA:	1 Ració =	Exemples
Poma, plàtan, taronja.	1 peça mitjana.	
Fruita trossejada, cuinada o envasada.	½ got	
Suc de fruita	½ got	Suc directe de la fruita, no amb sabors artificials.

Mesura

Una ració estàndard = 80 grams (Traduït en diferents unitats de gots depenen del tipus de verdura i fruita

Nota: Tubercles com la patata i el moniato no han de ser inclosos.

34. **Durant una setmana típica, quants dies menges fruites?** *(Indica el nombre o senyala no ho sé)*

Nombre de dies		Si no en consumeixes, salta a la pregunta 36.
No ho sé		

35. **Quantes porcions de fruites menges cada vegada?** *(Indica el nombre de porcions o senyala no ho sé)*

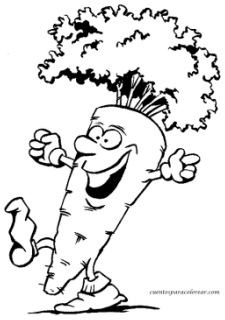
Nombre de porcions	
No ho sé	

36. **En una setmana típica, quants dies menges verdures?** *(Indica el nombre de vegades o senyala no ho sé)*

Nombre de dies		Si no en consumeixes, salta a la pregunta 38.
No ho sé		

37. **Quantes porcions de verdures menja en un d'aquests dies?** *(Indica el nombre de porcions o senyala no ho sé)*

Nombre de porcions	
No ho sé	



SECCIÓ 5: Auto informe de barreres per a la pràctica d'exercici físic

38. Què t'atura de ser físicament actiu? *(Marca la casella que més s'escau a tu per a cada frase)*

Activitats	**Si,**	**A vegades**	**No, no**
No m'agrada			
Tinc obligacions familiars			
Em falta energia			
No em puc permetre comprar l'equip			
Els equipaments esportius són lluny de casa			
Em fa sentir ridícul/a			
No tinc facilitat per fer exercici			
Em puc fer mal			
No vaig segur/a			
No disposo de mitjà de transport			
Em fa vergonya fer exercici físic davant dels alters			
Tinc sobrepès			
No estic prou en forma			
Em preocupa el transit			
Els meus pares no hi participen			
No tinc temps			
He d'ajudar a fer les feines de casa			
Tinc altres interessos (televisió, jocs d'ordinador...)			
El mal temps no em permet fer activitats a l'aire lliure			
No m'agraden els equipaments que hi ha			
No m'agraden els parcs que hi ha			
Els meus amics no hi participen			
El meu centre esportiu no té en consideració la meva			
Tinc massa feina d'escola			
No em sento segur/a per l'alt índex de delinqüència			
No m'agrada utilitzar els vestidors comunitaris			
No tinc cap model a seguir			
He d'ocupar-me d'algun familiar			
L'accés als centres esportius és molt car			

SECCIÓ 6. Dades de contacte.

Ara et demanem dades de contacte per si en un futur hem de comunicar-nos amb tu per poder continuar l'estudi. El nom no servirà per fer difusió de les teves respostes, sinó per disposar d'un contacte en el futur.

Nom	
Adreça de correu electrònic	
Facebook	
Telèfon móvil	
Telèfon fix	
Població de residencia	
Nom del teu institut	

Retorna el qüestionari a la persona encarregada del projecte!

Moltes Gràcies per la teva participació!

Appendix 4

Educational centres coursing Obligatory Secondary Education (ESO) in Osona.

Centre	Adreça	Web i/o e mail	Telèfon	Director	Professor E.F
1. IES Jaume Callís (públic)	Av. Olimpia 2. 08500. Vic	http://agora.xtec.cat/iesjaumecallis/intranet/index.php insjaumecallis@xtec.cat	93 885 20 17	Imma Andreu i Campdepadrós	Montse Pou
2. Institut la Plana (públic)	C. Rector de Vallfogona, 65. 08500. Vic	www.xtec.cat/centres/a8062870 a8062870@xtec.cat	93 883 48 51		
3. Institut de Vic (públic)	Av. Bernat Calbó, 8. 08500 Vic.	www.ivic.cat iesvic@xtec.cat	93 889 18 78	Miquel Rierola Atenció al públic: Dll: 16 – 18.00h	Helena Sala
4. Escorial (privat)	C. Sta Joaquima Vedruna, 6 08500 Vic	www.escorialvic.cat Possible enviar email des de la mateixa pàgina web.	93 886 36 12		David Muntadas
5. Pare Coll (privat)	C. Pare Coll, 17. 08500 Vic.	www.parecollvic.net	93 889 33 51	Dolors López	Àngel Santamarinya
6. Sagrat Cor (privat)	Pg. Generalitat, 11. 08500 Vic.	www.xtec.cat/col-sagratcor-vic	93 885 11 94	Miquel Maydeu	
7. Sant Miquel dels Sants (privat)	C. Jaume I el Conqueridor, 1-3. 08500Vic.	www.santmiqueldelssants.cat Possible enviar email des de la mateixa pàgina web.	93 886 12 44	Ignasi Roviró i Alemany	Montse Rovira i Costa
8. IES de Tona (públic)	C. Torres i Bages, 32. 08551. Tona	http://www.xtec.cat/iestona/tauler/tauler.htm	93 812 57 23	Dolors Casas Masías	Ester Marinez Dies
9. IES Pere Barnils (públic)	Avinguda Pere Barnils, s/n. 08540 Centelles.	http://www.xtec.net/iesperebarnils/info.htm iesperebarnils@xtec.cat	93 881 12 04 93 881 27 52	Joan Corbalan	
10. IES del Voltraganès (públic)	C/ Matagalls, 48. 08508 Les Masies de Voltregà.	www.iesvoltraganes.cat ies.voltraganes@iesvoltraganes.cat	93 857 26 72	Ferran Crespo Anglada	Albert Pubill
11. IES Antoni Pous i Argila (públic)	Av. De Roma, 260. 08560. Manlleu	http://agora.xtec.cat/ies-antoni-pous/intranet/ ies-antoni-pous@xtec.cat	93 851 37 05	Pilar Crispi	Dolors Corominas
12. IES Castell del Quer (públic)	C/ Mateu Garreta, s/n. 08513 Prats de Lluçanès.	http://agora.xtec.cat/ies-castelldelquer-prats/intranet/a8053005@xtec.cat	93 856 05 06		
13. IES Miquel Martí i Pol (públic)	Av. Miquel Martí i Pol, 1. 08510 Roda de Ter	http://www.xtec.cat/iesmartipol/	93 850 02 44		
14. IES Taradell (públic)	C/ Pompeu Fabra, 12. 08552. Taradell.	http://agora.xtec.cat/iestaradell/moodle/ instaradell@xtec.cat	93 880 00 12		
15. IES Cirvianum (públic)	C/ Ausias March, s/n. 08570. Torelló	http://www.xtec.es/iescirvianum/ iescirvianum@xtec.cat	93 859 48 41	Ramon Rusell Armengol	Iolanda Pujadas Marco
16. La Salle Manlleu (privat)	C/ Enric Delaris, 68. 08560. Manlleu.	http://manlleu.lasalle.cat a8019952@xtec.centres.cat	93 850 60 64	Joan Carles Jara i Reig. jjara@lasalle.cat	
17. Escola Sagrats Cors (privat)	C/ Hospital, 11-13. 08540 Centelles.	http://www.xtec.es/centres/a8016203/fra1.htm **a8016203@centres.xtec.es**	93 881 02 61		
18. PIVE (privat)	C/ Joan Llussà, 39. 08551 Tona.	www.pive.es info@pive.es	93 887 00 20		
19. SES de Calldetenes	Pg. Canigó, 27 08506. Calldetenes	http://agora.xtec.cat/sescalldetenes/moodle/	93 886 71 16	Dionis Felgueroso	
20. SES Bisaura	Mestre Quer, 11 08580 Sant Quirze de Besora	http://agora.xtec.cat/ses-bisaura/moodle/	93 855 08 16	Carolina Querol Dimarts 11	
21. Casals Gràcia	C/ Voltregà, 101 08560 Manlleu	http://www.xtec.cat/esc-casalsgracia/	93 850 73 98	Marc Codina Dijous mati - NO.	

22. Col·legi El Roser	Pg. Puig i Cuñer s/n 08514 Sant Julià de Vilatorta	http://www.xtec.cat/centres/a8026798/	93 812 22 44	Sr. Vilademunt Dimarts 11 i tardes	
23. Escola Vedruna – Tona	C/ Germana Victòria, 21 08551 Tona	http://www.evt.cat/	93 812 47 62	Sra Maite Planas	
24. Escola Rocaprevera	C/ Estudis, 7. 08570 Torelló	http://rocaprevera.cat/	93 859 06 30	Sra.Montse Viñas (dimarts 11h)	
25.Col·legi Sagrats Cors	C/ Puig d'Assalit, 32. 08570 Torelló	http://www.sagratscors.org/	93 859 04 90	Sra. Montserrat Bru	

Appendix 5

Consent form for the head master of each secondary school.

FULL D'AUTORITZACIÓ PER A PARTICIPANTS

Nom _____ **Data de naixement** _____

Adreça Professional _____ **DNI** _____

Adreça electrònica professional _____

Telèfon professional _____

He llegit i entenc la informació per els enquestats relativa a aquest projecte i estic d'acord a deixar omplir els qüestionaris a tots els alumnes de 4rt de secundària, per realitzar un estudi portat a terme pel Departament d'Educació de la Universitat de Vic i la Fundació d'Osona per la Recerca i l'Educació Sanitària (FORES).

En el marc del projecte, entenc que se'm demanarà que:

- Permeti que el responsable del projecte entri a l'aula durant un dia lectiu, prèviament acordat, per poder entregar els qüestionaris als alumnes de 4rt de secundària.
- Informi els professors corresponents sobre la realització d'aquesta enquesta.
- Els alumnes estiguin prèviament informats sobre el contingut i els motius de l'enquesta.

També entenc que la iniciativa inclourà:

- L'entrega per part del responsable del projecte d'un manual que permeti promocionar els estils de vida saludables a les escoles.
- Un possible seguiment a alumnes escollits aleatòriament durant els pròxims dos anys.

Els estudiants participen en l'estudi de manera voluntària. Poden deixar-lo en qualsevol moment, informant el responsable del projecte, però no cal que n'expliqui els motius.

Totes les dades recollides per mitjà d'aquest estudi seran confidencials i només es faran informes de dades resumides i anònimes. Les dades es publicaran de tal manera que no s'utilitzin els noms i que no es pugui identificar els subjectes de cap manera.

He resolt tots els dubtes en relació amb el projecte i estic d'acord a participar-hi.

☐ ☐

Appendix 6

Consent form for the participants of the UzonaGen95 project.

UVIC UNIVERSITAT DE VIC

L'activitat física i els estils de vida en els adolescents d'Osona

Ciències de l'activitat Física i l'esport (CAFE) **Ignasi Arumí Prat**

Facultat d'Educació Traducció I Ciències Humanes

Mail: ignasi.arumi@uvic.cat

FULL DE CONSENTIMENT

Si us plau, marqueu totes les afirmacions següents i signeu dues vegades on s'indica:

1. He llegit i entès tota la informació sobre l'estudi i entenc allò que s'espera de mi…… ☐
2. Ratifico que la meva participació és voluntària. Tinc el dret d'abandonar l'estudi en qualsevol moment. Només cal informar-ne a l´ Ignasi Arumí …… ☐
3. Dono el meu consentiment per utilitzar la informació que s'obtingui de manera anònima i confidencial. Les dades obtingudes es publicaran sense utilitzar el meu nom per tal de protegir la meva intimitat…….. ☐
4. Confirmo que disposo de la possibilitat de fer preguntes sobre l'estudi, les quals hauran de ser respostes degudament…… ☐
5. Certifico que com que soc menor d'edat els meus pares o tutors estan informats i aproven la meva participació en aquest estudi…….. ☐

Nom i cognoms _____

Signatura _____ **Data** _____

GARANTIA DE PROTECCIÓ DE DADES

Sóc conscient que la informació sobre la meva participació en aquest estudi serà emmagatzemada en suport informàtic de manera anònima.

Estic conforme que la Universitat de Vic faci ús de la informació sobre les meves experiències. Aquesta informació només podrà ésser utilitzada amb propòsits relacionats amb aquest estudi i el meu consentiment està condicionat a què la Universitat de Vic compleixi amb les seves obligacions de garantir la protecció de les dades.

Signatura _____ **Data** _____

M'agradaria rebre un resum dels resultats de l'estudi…….. ☐

L'activitat física i els estils de vida en els adolescents d'Osona

Ciències de l'activitat Física i l'esport (CAFE)

Ignasi Arumí Prat

Facultat d'Educació Traducció I Ciències Humanes

Mail: ignasi.arumi@uvic.cat

DADES PERSONALS

Si us plau, omple el següent qüestionari amb lletra clara i llegible:

Nom i Cognoms _____

Edat (anys)_____

Home/Dona_____

Ocupació _____

Adreça electrònica _____

Tota la informació personal serà confidencial, però algunes instruccions als participants podran ser comunicades mitjançant correu electrònic intern. Marca la casella amb una creu

si vols que no incloguem la teva adreça de correu electrònic en aquest grup ☐

Gràcies per la teva col·laboració. Si tens qualsevol dubte o pregunta, no dubtis a contactar amb nosaltres.

Appendix 7

Schools participating and non-participating in the study.

No han participat

Han participat

Centre	Director/a	Telèfon	Participen: Horari de visita i Nº d'alumnes.	No participen: Motius.
1. IES Jaume Callís (públic)	Imma Andreu i Campdepadrós	93 885 20 17		Falta de temps per passar les enquestes
2. Institut la Plana (públic)	Júlia Pamos	93 883 48 51	4rt ESO Dilluns 9 de maig 11.50 a 13.30. Email de confirmació enviat. 3 grups 27, 27 i 26 alumnes. Confirmat.	
3. Institut de Vic (públic)	Miquel Rierola	93 889 18 78	6 de Juny 11.30 i 7 de juny a les 9.00	
4. Escorial (privat)	Dolors Viladomat	93 886 36 12	Dijous 19 de maig de 16 – 17h. Confirmar la mateixa setmana.	
5. Col·legi Pare Coll	Dolors López	93 889 33 51	Dimecres 11 a les 11 hores (dos grups de 30). Confirmat.	
6. Sagrat Cor (privat)	Miquel Maydeu	93 885 11 94		Massa qüestionaris
7. Sant Miquel dels Sants (privat)	Ignasi Roviró i Alemany	93 886 12 44		No han mostrat interés en què els alumnes rebessin les enquestes.
8. IES de Tona (públic)	Dolors Casas Masías	93 812 57 23		Falta de temps.
9. IES Pere Barnils (públic)	Joan Brussosa	93 881 27 52	Dijous 12 de maig a les 9.20 (4 grups). Confirmat.	
10. IES del Voltraganès (públic)	Ferran Crespo Anglada	93 857 26 72		No. Pq no els hi agrada que es consulti sistemàticament des de centres externs als seus alumnes.
11. IES Antoni Pous i Argila	Pilar Crispi	93 851 37 05		Falta de temps
12. IES Castell del Quer (públic)	Lluís Forcada	93 856 05 06		
13. IES Miquel Martí i Pol (públic)	Judit Juvanteny	93 850 02 44		Massa just de temps
14. IES Taradell (públic)	Amàlia Parra	93 880 00 12	Dijous 19 de maig a les 10.30 Confirmar la mateixa setmana.	
15. IES Cirvianum (públic)	Ramon Rusell Armengol	93 859 48 41	Dimarts 14 de juny a ¾ de 12 80 alumnes	
16. La Salle Manlleu (privat)	Josep Solsona	93 850 60 64		No han respòs a emails i trucades
17. Escola Sagrats Cors (privat)	Andrés Ortega	93 881 02 61		
18. PIVE (privat)	Jofre Artur	93 887 00 20		Saturació d'enquestes. Aquest any els hi han passat varies enquestes als alumnes.
19. SES de	Dionis Felgueroso	93 886 71 16	Dimecres 18 de maig a les	

Calldetenes			12.30. Confirmar la mateixa setmana.	
20. SES Bisaura	Carolina Querol	93 855 08 16		No. No veuen clar que passin enquestes externes.
21. Casals Gràcia	Marc Codina	93 850 73 98	Si. Dimecres 18 de maig a les 16.00h. 1 grup de 30. Confirmar la mateixa setmana.	
22. Col·legi El Roser	Sr. Vilademunt	93 812 22 44		Falta de dies per passar les enquestes.
23. Escola Vedruna – Tona	Sra Maite Planas	93 812 47 62	Si. Dijous 12 de maig a les 16.00.	
24. Escola Rocaprevera	Sra.Montse Viñas	93 859 06 30	Si. Divendres 6 de maig de 12 a 13. 1 grup de 31.	
25.Col·legi Sagrats Cors	Sra. Montserrat Bru	93 859 04 90		No. Tenen totes les activitats planificades fins final de curs

Appendix 8

Missing data from Wave 1 (2011).

Dades perdudes segons subjectes en els qüestionari passat el 2011.

Activitats en el temps de lleure

33 – Masses dades perdudes impossible fer la mitja.

41 - He afegit 1 a bàdminton en concordança amb la mitja.

55 – He afegit 1 en bicicleta en concordança amb la mitja.

59 - He afegit 1 a arts marcials en concordança amb la mitja.

61 – He afegit 1 a aeròbic en concordança amb la mitja.

62 – Masses dades perdudes. Impossible fer la mitja.

71 - He afegit 1 a hockey en concordança amb la mitja.

138 - He afegit 1 en patinar en concordança amb la mitja.

262 - He afegit 1 a monopatí i futbol en concordança amb la mitja.

342 - He afegit 1 a atletisme en concordança amb la mitja.

343 – He afegit 1 en Jocs en concordança amb la mitja.

384 – Masses dades perdudes. Impossible fer la mitja.

397 - He afegit 1 a aeròbic en concordança amb la mitja.

402 – He afegit 1 a natació en concordança amb la mitja.

409 - He afegit 1 a aeròbic en concordança amb la mitja.

415 - Masses dades perdudes. Impossible fer la mitja.

435 - Masses dades perdudes. Impossible fer la mitja.

443 - He afegit 1 a ballar en concordança amb la mitja.

444 - He afegit 1 a voleibol en concordança amb la mitja.

459 – He afegit 1 en caminar en concordança amb la mitja.

478 - He afegit 1 en jocs en concordança amb la mitja.

498 - He afegit 1 en voleibol en concordança amb la mitja.

505 - He afegit 1 en jocs en concordança amb la mitja.

521 - He afegit 1 en jocs i bàsquet en concordança amb la mitja.

526 - He afegit 1 en rugby en concordança amb la mitja.

541 - He afegit 1 a atletisme en concordança amb la mitja.

545 - He afegit 1 a atletisme en concordança amb la mitja.

549 - He afegit 1 a gimnàstica en concordança amb la mitja.

554 - He afegit 1 a gimnàstica en concordança amb la mitja.

557 - He afegit 1 en saltar corda i peses en concordança amb la mitja.

560 – He afegit 1 a rugby i gimnàstica en concordança amb la mitja.

562 – Masses dades perdudes. Impossible fer la mitja.

564 - He afegit 1 a rugby en concordança amb la mitja.

586 – He afegit 1 a rugby en concordança amb la mitja.

597 - He afegit 1 a peses en concordança amb la mitja.

619 - Masses dades perdudes. Impossible fer la mitja.

620 - Masses dades perdudes. Impossible fer la mitja.

638 – He agefit 1 a Handbol, atletisme i peses en concordança amb la mitja.

646 – He agefit 1 a Handbol, atletisme i esports de raqueta en concordança amb la mitja.

650 - He afegit 1 a natació en concordança amb la mitja.

667 – He afegit 1 en patinar en concordança amb la mitja.

678 – He afegit 1 en patinar, bicicleta, esquiar i esports de raqueta en concordança amb la mitja.

683 – He afegit 1 en monopatí en concordança amb la mitja.

687 – He afegit 1 en aeròbic en concordança amb la mitja.

692 – He afegit 1 en esquiar en concordança amb la resta.

693 – Masses dades perdudes. Impossible fer la mitja.

Preguntes de la 10 a la 15

83 – La pregunta 16 he afegit un 1 tenint en compte totes les seves respostes en AF.

215 – Dades perdudes preguntes 10 – 14

292 – He afegit un 3 a la pregunta 14, tenint en compte les seves respostes.

328 - La pregunta 16 he afegit un 1 tenint en compte totes les seves respostes en AF.

526 – He afegit un 1 a la pregunta 14 tenint en compte les seves respostes.

564 – Masses dades perdudes.(eliminat)

661 – He afegit un 1 a la pregunta 11 tenint en compte totes les seves respostes.

686 – He afegit un 4 a la pregunta 15 tenint en compte totes les seves respostes.

Dies de la setmana

27 – Afegeixo 1 a dimarts, dijous, divendres, dissabte i diumenge, assumint que només ha respòs els dies que fa AF.

59 - Afegeixo 1 a dx, dj, div i diu assumint que només ha respòs els dies que fa A.F.

61 - Afegeixo 1 a dll, dx, dj, diss i diu assumint que només ha respòs els dies que fa A.F.

123 - Afegeixo 1 a dj i diss assumint que només ha respòs els dies que fa A.F.

126 - Afegeixo 1 a dj, div i diu assumint que només ha respòs els dies que fa A.F.

169 - Afegeixo 1 a dv, diss i diu assumint que només ha respòs els dies que fa A.F.

215 - Afegeixo 1 a dll, dx, dj i diss assumint que només ha respòs els dies que fa A.F.

287 - Afegeixo 1 a dv, ds i diu assumint que només ha respòs els dies que fa A.F.

324 - Afegeixo 1 a dll, dx, dj, dv, diss i diu assumint que només ha respòs els dies que fa A.F.

367 - Afegeixo 1 a dll, dx, dv i diu assumint que només ha respòs els dies que fa A.F.

374 - Afegeixo 1 a dll, dm, dx, dj i diu assumint que només ha respòs els dies que fa A.F.

425 - Afegeixo 1 a dv i diu assumint que només ha respòs els dies que fa A.F.

438 - Afegeixo 1 a dm, dv i diu assumint que només ha respòs els dies que fa A.F.

512 - Afegeixo 1 a dill i dx assumint que només ha respòs els dies que fa A.F.

560 - Afegeixo 1 a dill, dm, dx, dj, diss i diu assumint que només ha respòs els dies que fa A.F.

569 - Afegeixo 1 a dm, dx, dv i ds assumint que només ha respòs els dies que fa A.F.

591 - Masses dades perdudes. Impossible d'analitzar.

603 - Afegeixo 1 a dx i diu assumint que només ha respòs els dies que fa AF.

624 – Masses dades perdudes. Impossible d'analitzar.

693 - Afegeixo 1 a dll, dm, dx i dj assumint que només ha respòs els dies que fa AF.

Barreres per fer AF (falta canviar els números).

16 – Masses dades perdudes. Eliminat.

19 - Masses dades perdudes. Eliminat.

24 – Item 7 assumeixo un 2.

36 – Ítem 10 assumeixo un 2.

39 - Masses dades perdudes. Eliminat.

55 - Masses dades perdudes. Eliminat.

61 - Masses dades perdudes. Eliminat.

66 – Ítem 27, 28, 29 assumeixo un 3.

105 – Ítem 2 assumeixo un 2.

140 - Masses dades perdudes. Eliminat.

169 - Masses dades perdudes. Eliminat.

186 – Ítem 22 assumeixo un 2

211 - Masses dades perdudes. Eliminat.

341 – Ítem 2 assumeixo 2.

352 - Masses dades perdudes. Eliminat

368 - Masses dades perdudes. Eliminat

373 - Masses dades perdudes. Eliminat

387 – Ítem 12 assumeixo 3.

396 – Ítem 1 assumeixo 3.

403 – Ítem 1 assumeixo 3.

451 – Ítem 1 assumeixo 3.

475 – Ítem 20 assumeixo 3 i ítem 18 assumeixo un 2.

509 - Masses dades perdudes. Eliminat

510 - Masses dades perdudes. Eliminat

516 - Masses dades perdudes. Eliminat

526 - Masses dades perdudes. Eliminat

528 – Ítem 18 assumeixo 2, ítem 23 assumeixo 3.

537 - Masses dades perdudes. Eliminat

540 - Masses dades perdudes. Eliminat

547 – Ítem 29 assumeixo 3

557 – Ítem 22 assumeixo 2.

563 - Masses dades perdudes. Eliminat

584 – Ítem 22 assumeixo 3.

603 – Ítem 29 assumeixo 3.

618 - Masses dades perdudes. Eliminat

640 – Ítem 1 assumeixo 3

678 – Ítem 16 assumeixo 2.

682 - Masses dades perdudes. Eliminat.

685 – Ítem 2 assumeixo 3.

687 i 688 – Assumeixo 3 a les respostes que han quedat en blanc.

Appendix 9

Final questionnaire for the longitudinal study

(Waves 1, 2 and 3; 2012-2014).

L’activitat física i els estils de vida en els adolescents d’Osona: programa per detectar l’adquisició d’hàbits saludables en l’adolescència.

Informació General

Hola! Som part d’UzonaGen95 i venim de la Universitat de Vic. Aquest qüestionari serveix per mesurar quanta activitat física fas en la teva vida diària. També et demanarem altres comportaments relacionats amb la salut, com fumar, beure alcohol, menjar fruites i verdures i el temps que passes assegut. L’estudi ens donarà informació sobre què podem fer per millorar la salut dels adolescents d’Osona.

Contestar el qüestionari

Aquest qüestionari recull informació sobre:

(g) informació personal (secció 1)
(h) la teva activitat física habitual (secció 2)
(i) temps assegut (secció 3)
(j) barreres per la pràctica d’activitat física (secció 4)
(k) estils de vida: alcohol, tabac i dieta (secció 5)

La teva participació és molt important per fer possible aquest estudi. Contesta les preguntes i **segueix les instruccions en cursiva.**

I recorda aquest **4 punts:**

1. Les teves respostes no arribaran als teus pares o professors. El qüestionari és **anònim** i totalment **confidencial.**

2. Contesta **totes** les preguntes.

3. No hi ha respostes bones o dolentes, això **NO** és un **examen**

4. Contesta les preguntes de la forma més **honesta** i **sincera** possible.

Moltes gràcies per la teva ajuda i participació!

SECCIÓ 1: Informació personal

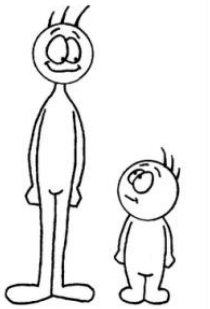
1a. Quina és la teva data de naixement? (*Escriu la resposta)*

Dia:	Mes:	Any:

1b. Sexe *(Marca la resposta amb una creu)*

Home:	Dona:

1c. Estatura sense sabates *(Escriu la resposta)*



	Cm.

1d. Pes (roba lleugera i sense sabates) *(Escriu la resposta)*

	Kg.

1e. Actualment practiques algun esport reglat de forma habitual ? *(Marca la teva resposta)*

Entenem esport reglat com aquell exercici físic competitiu, amb unes regles determinades i que realitzes de forma periòdica.

SI		Quin:
NO		

1f. Vas participar en aquest Projecte l'any passat?

SI		Quin centre:
NO		

SECCIÓ 2: NIVELLS D'ACTIVITAT FÍSICA.

En aquesta secció s'inclouen preguntes sobre l'activitat física realitzada a la feina, en els teus estudis, com a part de les feines de casa o feines de jardineria, per desplaçar-se d'un lloc a un altre, i l'activitat física realitzada en el temps lliure com a activitat d'esbarjo, exercici o esport.

Les teves respostes són importants.

Si us plau, respon totes les preguntes encara que no et consideris una persona físicament activa.

Al respondre les preguntes,

- **l'activitat física** vigorosa **es refereix a activitats que requereixen un esforç físic dur i que fan respirar més fort del normal**

- **l'activitat física** moderada **es refereix a activitats que requereixen un esforç físic moderat i que fan respirar una mica més fort del normal.**

APARTAT 1 : ACTIVITAT FÍSICA RELACIONADA AMB LA FEINA

La primera part d'aquesta secció fa referència a la feina. S'inclou la feina remunerada, les feines de la granja, treball com a voluntari, l'assistència a classe i qualsevol altra feina no remunerada que es faci fora de casa. No s'inclou la feina no remunerada que es pugui fer al voltant de casa, com les feines de la casa, cuidar el jardí o l'hort, feines de manteniment, i fer-se càrrec de la família. Totes aquestes activitats es valoren a l'apartat 3.

2a. **Actualment, treballes fora de casa, tens una feina no remunerada fora de casa teva o realitzes algun tipus d'estudis?** *(Marca la teva resposta).*

SI		
NO		**en aquest cas vés a** *l'apartat 2: Transport*

Les preguntes següents fan referència a l'activitat física que has fet en els **darrers 7 dies** com a part de la teva feina o estudis. No *s'ha d'incloure* el camí d'anar i tornar de casa a la feina o l'escola.

2b. **En els últims 7 dies, quants dies has fet activitat física *vigorosa* com aixecar pesos pesats, cavar, realitzar feines intenses en la construcció, o pujar escales *com a part de la teva feina*? Pensa només en les ocasions que vas realitzar aquesta activitat física durant almenys 10 minuts.** *(Especifica el nombre de dies o marca cap dia per setmana.)*

Dies a la setmana		
Cap dia per setmana		En aquest cas vés a la pregunta 2d.

2c. **En total, quan temps estàs fent activitat física vigorosa com *a part de la teva feina* en un d'aquests dies?** *(Especifica el nombre d'hores o minuts)*

hores ☐ minuts ☐

2d. **Una vegada més, pensa només en l'activitat física que has realitzat durant al menys 10 minuts. En els últims 7 dies, quants dies has realitzat activitat física *moderada*, com per exemple transportar pesos lleugers o realitzar treball dempeus amb moviment moderat dels braços *com a part de la teva feina*? Si us plau *no comptis* el que has fet caminant.** *(Especifica el nombre de dies o marca cap dia per setmana.)*

Dies a la setmana		
Cap dia per setmana		En aquest cas vés a la pregunta 2f.

2e. **En total, quant temps estàs fent activitat física moderada com *a part de la teva feina* en un d'aquests dies?** *(Especifica el nombre d'hores o minuts).*

hores ☐ minuts ☐

2f. **En els últims 7 dies, quants dies has *caminat* com a mínim 10 minuts *com a part de la teva feina*. Si us plau, *no comptis* el temps que camines per anar o tornar de la feina/escola.** *(Especifica el nombre de dies o marca cap dia per setmana.)*

Dies a la setmana		
Cap dia per setmana		En aquest cas vés a *l'apartat 2: transport*.

2g. **En total, quant temps camines *com a part de la teva feina* en un d'aquests dies?** *(Especifica el nombre d'hores o minuts).*

hores ☐ minuts ☐

APARTAT 2: ACTIVITAT FÍSICA RELACIONADA AMB EL MITJÀ DE TRANSPORT

Aquestes preguntes es refereixen a com et desplaces d'un lloc a l'altre, tenint en compte anar a la feina, institut, universitat, a comprar, al cinema, etc.

2h. **En els últims 7 dies, quants dies t'has *traslladat* en un vehicle a motor com el tren, l'autobús, el cotxe o el tramvia?** *(Especifica el nombre de dies o marca cap dia per setmana.)*

Dies a la setmana		
Cap dia per setmana		En aquest cas vés a la pregunta 2j

2i. **En total, quant temps sols estar viatjant en *cotxe, autobús, tren, o algun altre vehicle de motor* en un d'aquests dies?** *(Especifica el nombre d'hores o minuts).*

hores ☐ minuts ☐

Ara pensa *només* en els trajectes que pots haver fet en *bicicleta o caminant* per anar o tornar de la feina, escola, per fer petits trajectes o per anar d'un lloc a un altre.

2j. **En els últims 7 dies, quants dies has anat en *bicicleta* com a mínim 10 minuts *per anar d'un lloc a l'altre*?** *(Especifica el nombre de dies o marca cap dia per setmana.)*

Dies a la setmana		
Cap dia per setmana		En aquest cas vés a la pregunta 2l.

2k. **En total, quant temps sols anar en bicicleta *per anar d'un lloc a l'altre* en un d'aquests dies?** *(Especifica el nombre d'hores o minuts).*

hores ☐ minuts ☐

2l. **En els últims 7 dies, quants dies *has caminat*, com a mínim 10 minuts *per anar d'un lloc a l'altre* ?** *(Especifica el nombre de dies o marca cap dia per setmana.)*

Dies a la setmana		
Cap dia per setmana		En aquest cas vés a *l'apartat 3: feines de casa, manteniment de la casa i prendre cura de la família.*

2m**. En total, quant temps sols caminar *per anar d'un lloc a l'altre* en un d'aquests dies?** *(Especifica el nombre d'hores o minuts).*

hores ☐ minuts ☐

APARTAT 3: FEINES DE CASA, MANTENIMENT DE LA CASA I CUIDAR LA FAMÍLIA

Aquest apartat fa referència a l'activitat física que tu hagis pogut fer en els últims 7 dies *a casa teva o al voltant de casa teva*, com les feines de la casa, cuidar el jardí o l'hort, feines de manteniment, fer-se càrrec de la família...

2n**. Pensa *només* en l'activitat física que has realitzat durant al menys 10 minuts. En els últims 7 dies, quants dies has realitzat activitat física *vigorosa al jardí o a l'hort* com per exemple aixecar pesos pesats, realitzar treballs pesats de bricolatge tallar troncs d'arbres, apartant neu o cavant?** *(Especifica el nombre de dies o marca cap dia per setmana.)*

Dies a la setmana		
Cap dia per setmana		En aquest cas vés a la pregunta 2p.

2o**.En total, quant temps sols estar fent activitat física vigorosa *al jardí o a l'hort* en un d'aquests dies?** *(Especifica el nombre d'hores o minuts).*

hores ☐ minuts ☐

2p. **Una vegada més, pensa *només* en l'activitat física que has realitzat durant almenys 10 minuts. En els últims 7 dies, quants dies has realitzat activitat física *moderada*, com per exemple rentar el cotxe, transportar pesos lleugers, escombrar, netejar finestres, recollir fulles amb un rasclet *al jardí o a l'hort*? *(Especifica el nombre de dies o marca cap dia per setmana.)*

Dies a la setmana (especifica)		
Cap dia per setmana		En aquest cas vés a la pregunta 2r.

2q**.En total, quant temps sols estar fent activitat moderada *al jardí o a l'hort* en un d'aquests dies?** *(Especifica el nombre d'hores o minuts).*

hores ☐ minuts ☐

2r**. Una vegada més, pensa *només* en l'activitat física que has realitzat durant al menys 10 minuts. En els últims 7 dies, quants dies has realitzat activitat física *moderada*, com per exemple jugar amb els nens, petits treballs de bricolatge, transportar pesos lleugers, netejar finestres, fregar el terra o escombrar *a dintre de casa teva*?** *(Especifica el nombre de dies o marca cap dia per setmana.)*

Dies a la setmana		
Cap dia per setmana		En aquest cas vés a *l'apartat 4: activitat física realitzada en el temps lliure com activitat d'esbarjo, exercici o esport.*

2s**. En total, quan temps sols estar fent activitat física moderada *a dintre de casa teva* en un d'aquests dies?** *(Especifica el nombre d'hores o minuts).*

hores ☐ minuts ☐

APARTAT 4: ACTIVITAT FÍSICA REALITZADA EN EL TEMPS LLIURE COM A ACTIVITAT D'ESBARJO, EXERCICI O ESPORT.

Aquest apartat fa referència a l'activitat física que tu has fet en els darrers 7 dies com a activitat física d'esbarjo, exercici o esport o de lleure. NO s'ha d'incloure cap activitat física ja mencionada anteriorment.

2t. ***Sense comptar cap de les hores que has estat caminant i que ja has mencionat*** **anteriorment, en els últims 7 dies , quants dies has caminat com a mínim 10 minuts *en el teu temps lliure*?** *(Especifica el nombre de dies o marca cap dia per setmana.)*

Dies a la setmana		
Cap dia per setmana		En aquest cas vés a la pregunta 2v.

2u**. En total, quant temps has caminat en el *teu temps lliure* en un d'aquests dies?** *(Especifica el nombre d'hores o minuts).*

hores ☐ minuts ☐

2v. **Pensa *només* en l'activitat física que has realitzat durant almenys 10 minuts. En els últims 7 dies, quants dies has realitzat activitat física *vigorosa* com és l'aeròbic, anar a córrer, bicicleta a marxa ràpida, nedar ràpid o esquí de muntanya en el teu *temps lliure*?** *(Especifica el nombre de dies o marca cap dia per setmana.)*

Dies a la setmana (especifica)		
Cap dia per setmana		En aquest cas vés a la pregunta 2y.

2x**.En total, quant temps sols estar fent activitat física vigorosa en el teu *temps lliure* en un d'aquests dies?** *(Especifica el nombre d'hores o minuts).*

hores ☐ minuts ☐

2y**. Una vegada més, pensa *només* en l'activitat física que has realitzat durant al menys 10 minuts. En els últims 7 dies, quants dies has realitzat activitat física *moderada*, com per exemple bicicleta a ritme regular, nedar a ritme regular , navegar a vela, esports d'equip, esquiar, muntanyisme, dobles de tenis en el teu *temps lliure*?** *(Especifica el nombre de dies o marca cap dia per setmana).*

Dies a la setmana		
Cap dia per setmana		En aquest cas vés a la *secció 3.*

2z**.En total, quant temps sol estar fent activitat física moderada en el seu *temps lliure* en un d'aquests dies?** *(Especifica el nombre d'hores o minuts).*

hores ☐ minuts ☐

SECCIÓ 3: TEMPS ASSEGUT

Indiqueu-nos quant de temps un DIA LABORABLE típic durant el curs escolar feu les següents activitats, en què passeu la major part del temps assegut, sense moure-us. Compteu el temps des que us desperteu fins que us n'aneu al llit. *Encercleu l'opció més adient en cada cas. Si feu dues coses alhora, compteu només l'activitat principal.*

APARTAT 1: DIES ENTRE SETMANA

Mirant la televisió/vídeos/DVD	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	5 o + hores. Especifica quantes:
Jugant a l'ordinador o videojocs (com la Nintendo o xbox)	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Navegar per Internet, consultar el correu electrònic o altres mitjans electrònics per oci.	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Fent els deures (inclou: llegir, escriure o utilitzant l'ordinador.)	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Estar assegut escoltant música (radio, CD, MP3, iPod, etc.)	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Estar assegut parlant per telèfon o enviant missatges, whats up...	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Estar assegut, passant l'estona parlant amb amics o familiars.	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Llegint un llibre o una revista que no sigui per l'escola. (Incloent-hi còmics.)	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Fent activitats sedentàries (musica, art, manualitats, anar al cine etc)	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Assegut a dintre d'un cotxe o transport públic	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Assegut a la feina o a classe	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	

APARTAT 2: CAPS DE SETMANA

Indiqueu-nos quant de temps un DIA DE CAP DE SETMANA típic feu les següents activitats, en què passeu la major part del temps assegut, sense moure-us. Compteu el temps des que us desperteu fins que us n'aneu al llit. *Encercleu l'opció més adient en cada cas. Si feu dues coses alhora, compteu només l'activitat principal.*

Mirant la televisió/vídeos/DVD	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	5 o + hores. Especifica quantes:
Jugant a l'ordinador o videojocs (com la Nintendo o xbox)	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Navegar per Internet, consultar el correu electrònic o altres mitjans electrònics per oci.	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Fent els deures (inclou: llegir, escriure o utilitzant l'ordinador.)	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Estar assegut escoltant música (radio, CD, MP3, iPod, etc.)	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Estar assegut parlant per telèfon o enviant missatges, whats up...	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Estar assegut, passant l'estona parlant amb amics o familiars.	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Llegint un llibre o una revista que no sigui per l'escola. (Incloent-hi còmics.)	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Fent activitats sedentàries (musica, art, manualitats, anar al cine etc)	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Assegut a dintre d'un cotxe o transport públic	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	
Assegut a la feina o a classe	No	15 min	30 min	1 hora	2 hores	3 hores	4 hores	

SECCIÓ 4: AUTO INFORME DE BARRERES PER A LA PRÀCTICA D'EXERCICI FÍSIC

4a. Què t'atura de ser físicament actiu? *(Marca la casella que més s'escau a tu per a cada frase)*

Activitats	**Sí, m'atura**	**A vegades m'atura**	**No, no m'atura**
Tinc obligacions familiars			
No em puc permetre comprar l'equip per fer activitat física			
No m'agrada			
Em falta energia			
Els equipaments esportius són lluny de casa			
Em fa sentir ridícul/a			
No tinc facilitat per fer exercici			
Em puc fer mal			
No vaig segur/a			
No disposo de mitjà de transport			
Em fa vergonya fer exercici físic davant dels altres			
Tinc sobrepès			
No estic prou en forma			
Em preocupa el trànsit			
Els meus pares no hi participen			
No tinc temps			
He d'ajudar a fer les feines de casa			
Tinc altres interessos (televisió, jocs d'ordinador...)			
El mal temps no em permet fer activitats a l'aire lliure			
No m'agraden els equipaments que hi ha			
No m'agraden els parcs que hi ha			
Els meus amics no hi participen			
El meu centre esportiu no té en consideració la meva cultura/religió			
Tinc massa feina d'escola			

No em sento segur/a per l'alt índex de delinqüència			
No m'agrada utilitzar els vestidors comunitaris			
No tinc cap model a seguir			
He d'ocupar-me d'algun familiar			
L'accés als centres esportius és molt car			

SECCIÓ 5: ESTILS DE VIDA: CONSUM DE TABAC, ALCOHOL, FRUITES I VERDURES

Tot seguit algunes preguntes sobre comportaments relacionats amb estils de vida.

APARTAT 1: TABAC

5a. Actualment fumes algun producte de tabac, com cigarretes, puros o pipes? *(Marca una opció)*

Sí.		
No.		Si no, salta a la pregunta 5e.

5b. Amb quina freqüència fumes actualment? *(Marca una opció)*

Menys d'un cigarret al dia	
Un cigarret al dia	
Entre 2 i 5 cigarrets al dia	
Entre 6 i 10 cigarrets al dia	
Entre 11 i 20 cigarrets al dia	
Mes de 20 cigarrets al dia	

5c. Quin d'aquests productes fumes? *(Marca la teva opció)*

	Cigarrets
	Tabac de cargolar
	Pipa
	Puros
	Altres *(especifica'ls)*

5d. De mitjana, quants productes dels següents fumes cada dia? *(Escriu la quantitat que fumes per a cada tipus de producte)*

	Cigarrets
	Tabac de cargolar
	Pipa
	Puros
	Altres *(especifica'ls)*

APARTAT 3: FRUITES I VERDURES

5e. En un dia normal, quantes porcions de fruita menges al dia? *(Marca la teva resposta)*

No(0)	
1	
2	
3	
4	
5 o més	

Una porció és igual a:

- 1 peça mitjana de fruita.
- 1/2 tassa de macedònia
- 1/4 de tassa de panses, avellanes o un altre tipus de fruits secs.
- 1 vas de 100% suc de taronja, poma o altres fruites.

(No comptis còctel de fruites, llimonada o begudes amb gas.)

5f. **En un dia normal, quantes porcions de verdura menges al dia?** *(Marca la teva resposta)*

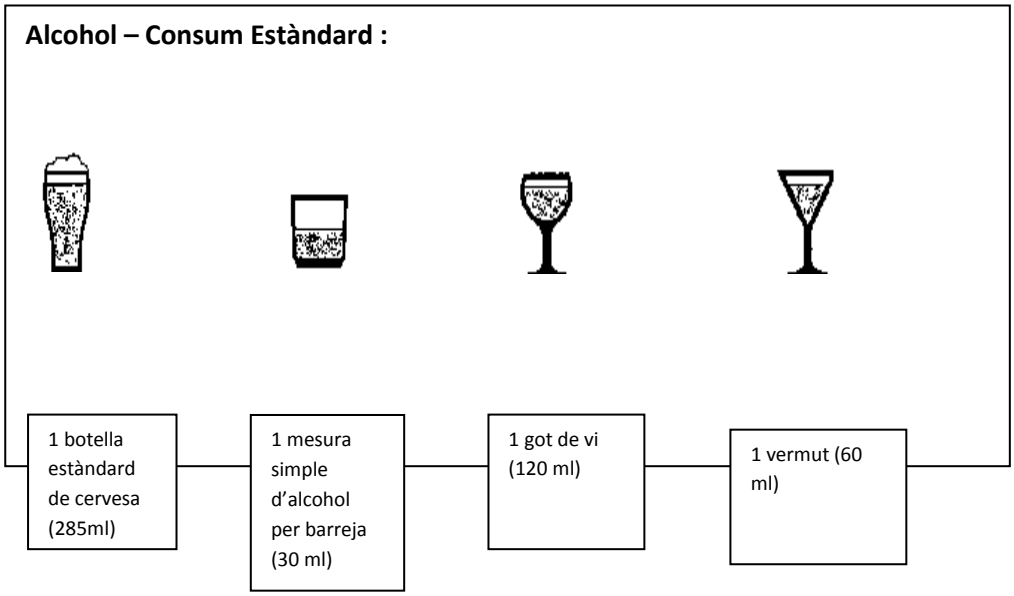
No(0)	
1	
2	
3	
4	
5 o més	

Una porció és igual a:

- 1 pastanaga o qualsevol altra verdura fresca de mida mitjana.
- 1 bol petit d'amanida verda.
- 1/2 tassa de verdures fresques o cuinades.
- 3/4 tassa de sopa de verdures.

(No hi comptis patates fregides o una bossa de patates)

APARTAT 2: ALCOHOL



5g. Has consumit alguna beguda alcohòlica els últims 30 dies? *(Marca una opció)*

Sí.		
No.		Si no, ja has acabat.

5h. Durant els últims 30 dies, amb quina freqüència has pres almenys una beguda alcohòlica? *(Marca només una opció)*

Cada dia	
5-6 dies a la setmana	
1-4 dies a la setmana	
1-3 dies al mes	
Menys d'un cop al mes	

Aquest és el final del qüestionari!!

Moltes Gràcies per la teva participació!!

Appendix 10

Evaluation of the questionnaire for wave 2 (2012).

AVALUACIÓ DEL QÜESTIONARI:

Estils de vida en l'adolescència

1. Edat *(en anys):* ( )

2. Sexe: Home **o** dona

3. Nacionalitat: Estrangera **o** No estrangera

4. Quin és el seu nivell màxim d'estudis finalitzats? *(Marqueu la resposta amb una creu)*

01. No sap llegir ni escriure
02. Estudis primaris incomplets: sap llegir i escriure sense haver finalitzat l'educació primària
03. Estudis primaris complets: cinc cursos aprovats d´EGB
04. Primera etapa d'educació secundària: graduat escolar, batxillerat elemental, EGB o ESO
05. Ensenyaments de batxillerats: batxillerat superior, BUP, batxillerat pla nou, PREO o COU
06. Formació professional de grau mitjà: oficial industrial, FPI, cicles formatius de grau superior.
07. Formació professional de grau superior: mestratge industrial, FPII, cicles formatius de grau superior
08. Universitaris de grau mitjà: diploedres i ensenyaments universitaris de primer cicle
09. Universitaris de grau superior: llicenciatures i ensenyaments universitaris de segon cicle
10. Universitaris de tercer cicle: doctorats
11. Una altra possibilitat. Especifiqueu-la:_____

5. Quina és la seva situació laboral actual? *(Marqueu la resposta amb una creu)*

01. Treballa
02. Treballa però té la baixa
03. Aturat/da amb subsidi
04. Aturat/da sense subsidi
05. Feina de la llar
06. Estudiant
07. Altres situacions. Especifiqueu-la:

6. Us ha costat entendre el qüestionari en general? *(Encercleu la resposta corresponent)*

No ha costat gens	Ha costat poc	***Ha costat***	Ha costat bastant	Ha costat molt
1	2	***3***	4	5

7. Us ha costat entendre cadascuna de les seccions del qüestionari? *(Marqueu amb una creu la resposta corresponent a cada fila)*

	No ha costat gens	Ha costat poc	***Ha costat***	Ha costat bastant	Ha costat molt
1.Informació personal	1	2	***3***	4	5
2.Activitat física	1	2	3	4	5
3.Temps assentat	1	2	3	4	5
4.Barreres	1	2	3	4	5
5.Estils de vida	1	2	3	4	5

8. Creieu que en general el qüestionari és difícil de respondre? *(Encercleu la resposta)*

Gens difícil	***Una mica difícil***	***Difícil***	Bastant difícil	***Molt difícil***
1	***2***	***3***	4	***5***

9. Avalueu el grau de dificultat que suposa respondre cada secció del qüestionari. *(Marqueu amb una creu la resposta corresponent a cada fila)*

	Gens difícil	Una mica difícil	***Difícil***	Bastant difícil	Molt difícil
1.Informació personal	1	2	***3***	4	5
2.Activitat física	1	2	3	4	5
3.Temps assentat	1	2	3	4	5
4.Barreres	1	2	3	4	5
5.Estils de vida	1	2	3	4	5

10. Creieu que el qüestionari és excessivament llarg? *(Encercleu la resposta)*

Gens llarg 1	***Una mica llarg*** ***2***	***Llarg*** ***3***	Bastant llarg 4	***Molt llarg*** ***5***

11. Proposes algun canvi en els ítems del qüestionari que milloraria la comprensió del mateix? Quins?
(*Penseu en les diferents seccions).*

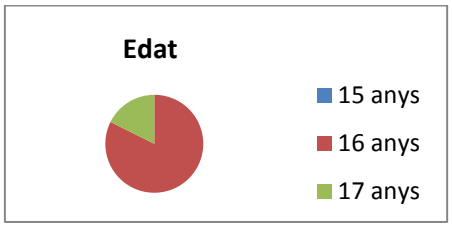
Appendix 11

Evaluation of the pilot study conducted before wave 2 (2012).

Avaluació Prova Pilot:

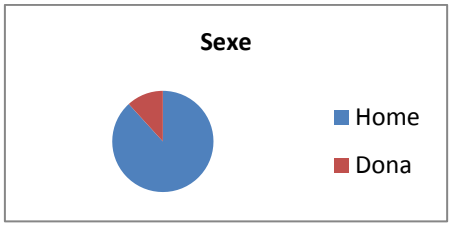
1. Edat:

15	
16	14
17	3



2. Sexe

Home	15
Dona	2



3. Nacionalitat

Estrangera	
No estrangera	17

4. Quin és el seu nivell màxim d'estudis finalitzats?

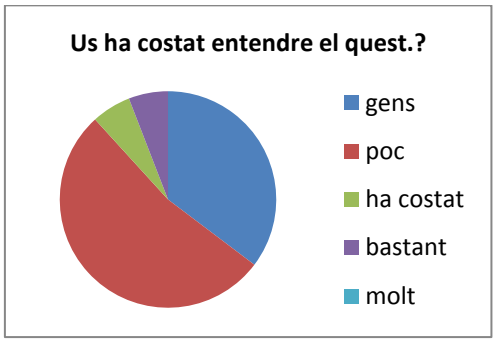
01. No sap llegir ni escriure	
02. Estudis primaris incomplets: sap llegir i escriure sense haver finalitzat l'educació primària	
03. Estudis primaris complets: cinc cursos aprovats d´EGB	
04. Primera etapa d'educació secundària: graduat escolar, batxillerat elemental, EGB o ESO	11
05. Ensenyaments de batxillerats: batxillerat superior, BUP, batxillerat pla nou, PREO o COU	5
06. Formació professional de grau mitjà: oficial industrial, FPI, cicles formatius de grau superior.	1
07. Formació professional de grau superior: mestratge industrial, FPII, cicles formatius de grau superior	
08. Universitaris de grau mitjà: diploedres i ensenyaments universitaris de primer cicle	
09. Universitaris de grau superior: llicenciatures i ensenyaments universitaris de segon cicle	
10. Universitaris de tercer cicle: doctorats	
11. Una altra possibilitat. Especifiqueu-la:_____	

5. Quina és la seva situació laboral actual?

1.Treballa	
2.Treballa però té la baixa	
3.Aturat/da amb subsidi	
4.Aturat/da sense subsidi	
5.Feina de la llar	
6.Estudiant	16
Altres situacions. Especifiqueu-la:	1

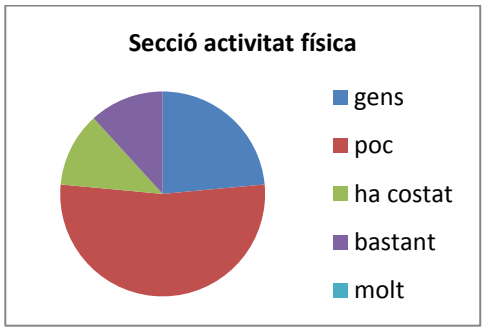
6. Us ha costat entendre el qüestionari en general?

No ha costat gens	6
Ha costat poc	9
Ha costat	1
Ha costat bastant	1
Ha costat molt	



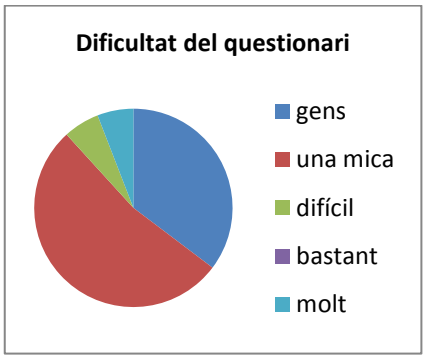
7. Us ha costat entendre cadascuna de les seccions del qüestionari?

	No ha costat gens	Ha costat poc	Ha costat	Ha costat bastant	Ha costat molt
1.Informació personal	10	6	1		
2.Activitat física	4	9	2	2	
3.Temps assentat	11	5		1	
4.Barreres	11	6			
5.Estils de vida	12	5			



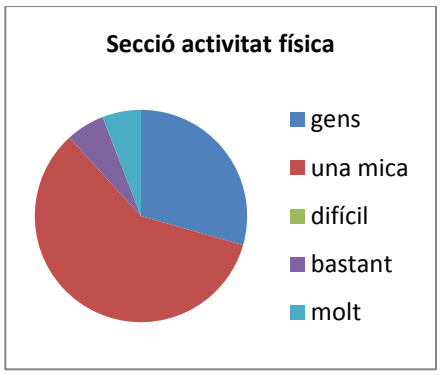
8. Creieu que en general el qüestionari és difícil de respondre?

Gens difícil	6
Una mica difícil	9
Difícil	1
Bastant difícil	
Molt difícil	1



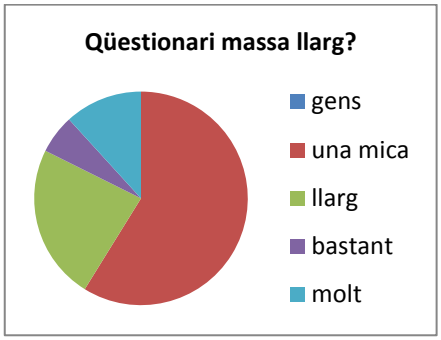
9. Avalueu el grau de dificultat que suposa respondre cada secció del qüestionari.

	Gens difícil	Una mica difícil	Difícil	Bastant difícil	Molt difícil
1.Informació personal	11	5			1
2.Activitat física	5	10		1	1
3.Temps assentat	6	8	2		1
4.Barreres	10	4	2		1
5.Estils de vida	12	2	1	1	1



10. Creieu que el qüestionari és excessivament llarg?

Gens llarg	
Una mica llarg	10
Llarg	4
Bastant llarg	1
Molt llarg	2



11. Proposes algun canvi en els ítems del qüestionari que milloraria la comprensió del mateix? Quins?

- Trauria la secció 4 ja que no és del tot necessària i es fa una mica pesada.
- Estaria bé que algunes preguntes no fossin només de resposta estil-test.
- L'apartat d'activitat física es feia llarg i dificultós entendre les preguntes plantejades.
- Menys preguntes
- No enrotllar-se tant en els anunciats i fer preguntes més concretes i senzilles

12. Altres Comentaris:

- Una persona no ha respòs l'avaluació del qüestionari.

Appendix 12

High school centres from the county of Osona.

Centre	Adreça	Web i e mail	Telèfon	Director
1. IES Jaume Callís	Av. Olimpia 2. 08500. Vic	http://agora.xtec.cat/iesjaumecallis/intranet/index.php insjaumecallis@xtec.cat	93 885 20 17	Imma Andreu i Campdepadrós
2. Institut la Plana (públic)*	C. Rector de Vallfogona, 65. 08500. Vic	www.xtec.cat/centres/a8062870 a8062870@xtec.cat	93 883 48 51	Júlia Pamos Teresa Rodoreda – cap d'estudis.
3. Institut de Vic (públic)*	Av. Bernat Calbó, 8. 08500 Vic.	www.ivic.cat iesvic@xtec.cat	93 889 18 78	Concepció de Rocafiguera Cap d'estudis. Florenci Barniol
4. Escorial (privat)*	C. Sta Joaquima Vedruna, 6 08500 Vic	www.escorialvic.cat Possible enviar email des de la mateixa pàgina web.	93 886 36 12	Dolors Viladomat Dra. de batx: **Pilar Pous**
5. Sant Miquel dels Sants (privat)	C. Jaume I el Conqueridor, 1-3. 08500Vic.	www.santmiqueldelssants.cat tm@santmiqueldelssants.cat	93 886 12 44	Ignasi Roviró i Alemany Assumpta Vila i Alsina (directora de batx.)
6. ESAD de Vic Escola d'Art de Vic	Rbla. Sant Domènech, 24	www.eartvic.net eartvic@xtec.cat ramon@eartvic.net	93885 48 51	Ramon Ricard Coordinador de batx: Santi Farre
7 IES de Tona (públic)	C. Torres i Bages, 32. 08551. Tona	http://www.xtec.cat/iestona/tauler/tauler.htm a8054277@xtec.cat	93 812 57 23	Dolors Casas Masías **Montse Camps**
8. IES Pere Barnils (públic)*	Avinguda Pere Barnils, s/n. 08540 Centelles.	http://www.xtec.net/iesperebarnils/info.htm iesperebarnils@xtec.cat	93 881 12 04 93 881 27 52	Joan Brussosa
9. IES Antoni Pous i Argila (públic)	Av. De Roma, 260. 08560. Manlleu	http://agora.xtec.cat/ies-antoni-pous/intranet/ ies-antoni-pous@xtec.cat	93 851 37 05	Pilar Crispi
10. IES Castell del Quer (públic)*	C/ Mateu Garreta, s/n. 08513 Prats de Lluçanès.	http://agora.xtec.cat/ies-castelldelquer-prats/intranet/ a8053005@xtec.cat	93 856 05 06	Lluís Forcada.
11. IES Miquel Martí i Pol (públic)	Av.Miquel Martí i Pol, 1. 08510 Roda de Ter	http://www.xtec.cat/iesmartipol/ a8053042@xtec.cat	93 850 02 44	Lluis Monteis
12. IES Taradell (públic)*	C/ Pompeu Fabra, 12. 08552Taradell.	http://agora.xtec.cat/iestaradell/moodle/ instaradell@xtec.cat	93 880 00 12	Amàlia Parra **Eva Tordera**
13. IES Cirvianum (públic)*	C/ Ausias March, s/n. 08570. Torelló	http://www.xtec.es/iescirvianum/ iescirvianum@xtec.cat **mbardol1@xtec.cat**	93 859 48 41	Ramon Rusell Armengol
14. La Salle Manlleu	C/ Enric Delaris, 68. 08560.	http://manlleu.lasalle.cat a8019952@xtec.centres.ca	93 850 60 64	Josep Solsona

(privat)	Manlleu.	t		
15. PIVE (privat)	C/ Joan Llussà, 39. 08551 Tona.	www.pive.es info@pive.es	93 887 00 20	Jofre Artur
16. IES del Voltraganès (públic)	C/ Matagalls, 48. 08508 Les Masies de Voltregà.	www.iesvoltraganes.cat ies.voltraganes@iesvoltraganes.cat **a8060976@xtec.cat** atort@xtec.cat	93 857 26 72	**Assumpta Tort**

* Centres que varen participar l'any passat en el projecte.

Appendix 13

High school participation and non-participation centres.

Centre	Adreça	Web i e mail	Director	Professor E.F	Motiu per la no participació
1. IES Jaume Callís	Av. Olimpia 2. 08500. Vic	http://agora.xtec.cat/iesjaumecallis/intranet/index.php insjaumecallis@xtec.cat	Imma Andreu i Campdepadrós	Montse Pou. Roser Parés	
2. Institut la Plana (públic)*	C. Rector de Vallfogona, 65. 08500. Vic	www.xtec.cat/centres/a8062870 a8062870@xtec.cat jpamos@xtec.cat	Júlia Pamos Teresa Rodoreda – cap d'estudis.	Quim Zorrilla Moreno. Contactar amb ell.	
3. Institut de Vic (públic)*	Av. Bernat Calbó, 8. 08500 Vic.	www.ivic.cat iesvic@xtec.cat	Concepció de Rocafiguera Trucar Antoni Vallbona (dijous de 12.30 a 13.30) Cap d'estudis.	Helena Sala Florenci Barniol	
4. Escorial (privat)*	C. Sta Joaquima Vedruna, 6 08500 Vic	www.escorialvic.cat Possible enviar email des de la mateixa pàgina web. dolorsviladomat@vedruna.org	Dolors Viladomat Dra. de batx: Pilar Pous	Carme Jimenez	
5. Sant Miquel dels Sants (privat)	C. Jaume I el Conqueridor, 1-3. 08500Vic.	www.santmiqueldelssants.cat Possible enviar email des de la mateixa pàgina web. tm@santmiqueldelssants.cat	Ignasi Roviró i Alemany Contactar amb Assumpta Vila i Alsina (directora de	Montse Rovira i Costa	No han mostrat interès per participar a l'estudi.

			secundària i batx.)		
6. ESAD de Vic **Escola d'Art i Superior de Disseny de Vic.**	Rbla. Sant Domènech, 24	www.eartvic.net eartvic@xtec.cat ramon@eartvic.net	Ramon Ricard Coordinador de batx: Santi Farre sfarre@eartvic.net		Falta de disponibilitat i temps.
7 IES de Tona (públic)	C. Torres i Bages, 32. 08551. Tona	http://www.xtec.cat/iestona/tauler/tauler.htm a8054277@xtec.cat	Dolors Casas Masías	Ester Marinez Dies	
8. IES Pere Barnils (públic)*	Avinguda Pere Barnils, s/n. 08540 Centelles.	http://www.xtec.net/iesperebarnils/info.htm iesperebarnils@xtec.cat	Joan Brussosa	Carme Gallifa Rovira	
9. IES Antoni Pous i Argila (públic)	Av. De Roma, 260. 08560. Manlleu	http://agora.xtec.cat/ies-antoni-pous/intranet/ ies-antoni-pous@xtec.cat	Pilar Crispi	Dolors Corominas	No tenien suficients hores de tutoria.
10. IES Castell del Quer (públic)*	C/ Mateu Garreta, s/n. 08513 Prats de Lluçanès.	http://agora.xtec.cat/ies-castelldelquer-prats/intranet/ a8053005@xtec.cat	Lluís Forcada.	Esther lopez	
11. IES Miquel Martí i Pol (públic)	Av.Miquel Martí i Pol, 1. 08510 Roda de Ter	http://www.xtec.cat/iesmartipol/ a8053042@xtec.cat	Lluis Monteis	Dolors Aymerich	No els hi agrada participar en estudis externs.
12. IES Taradell (públic)*	C/ Pompeu Fabra, 12. 08552. Taradell.	http://agora.xtec.cat/iestaradell/moodle/ instaradell@xtec.cat	Amàlia Parra	Guillem Pladelasala i Pradell	
13. IES Cirvianum	C/ Ausias March, s/n.	http://www.xtec.es/iescirvia	Ramon Rusell	Iolanda Pujadas	

(públic)*	08570. Torelló	num/ iescirvianum@xtec.cat	Armengol	Marco. Jordi Surinyach	
14. La Salle Manlleu (privat)	C/ Enric Delaris, 68. 08560. Manlleu.	http://manlleu.lasalle.cat a8019952@xtec.centres.cat	Josep Solsona	Glòria Pladevall	
15. PIVE (privat)	C/ Joan Llussà, 39. 08551 Tona.	www.pive.es info@pive.es	Jofre Artur	Pere Vila pvila@pive.es	
16. IES del Voltraganès (públic)	C/ Matagalls, 48. 08508 Les Masies de Voltregà.	www.iesvoltraganes.cat ies.voltraganes@iesvoltraganes.cat	Assumpta Tort atort@xtec.cat		

Appendix 14

UZONAGen95 Logo, bracelets and ID card.

UVIC UNIVERSITAT DE VIC

UZONAGen95

*In the most visible part of the bracelet it will be written in white: gen95.uvic.cat

Carnet

Gen95

gen95.uvic.cat

uzonagen95@gmail.com

Appendix 15

UZONAGen95 informative sign.

Què és? Gen95 és un projecte que fa un seguiment dels estils de vida en els adolescents d'Osona.
Qui ho fa? La Universitat de Vic.
Què he de fer? Anar a la pàgina web www.gen95.uvic.cat , registrar-vos i omplir un qüestionari de 15 minuts.
Què hi guanyo a canvi? Si omples el qüestionari podràs gaudir dels VALS UVIC amb descomptes fins el 50% en 15 botigues, bars i restaurants d'Osona. A la Web hi trobaràs informació d'oci i interès per a gent de la teva edat!
Com aconsegueixo els vals? Un cop omplerta l'enquesta s'ha d'anar a la pàgina web www.gen95.uvic.cat i descarregar-te els VALS UVIC.

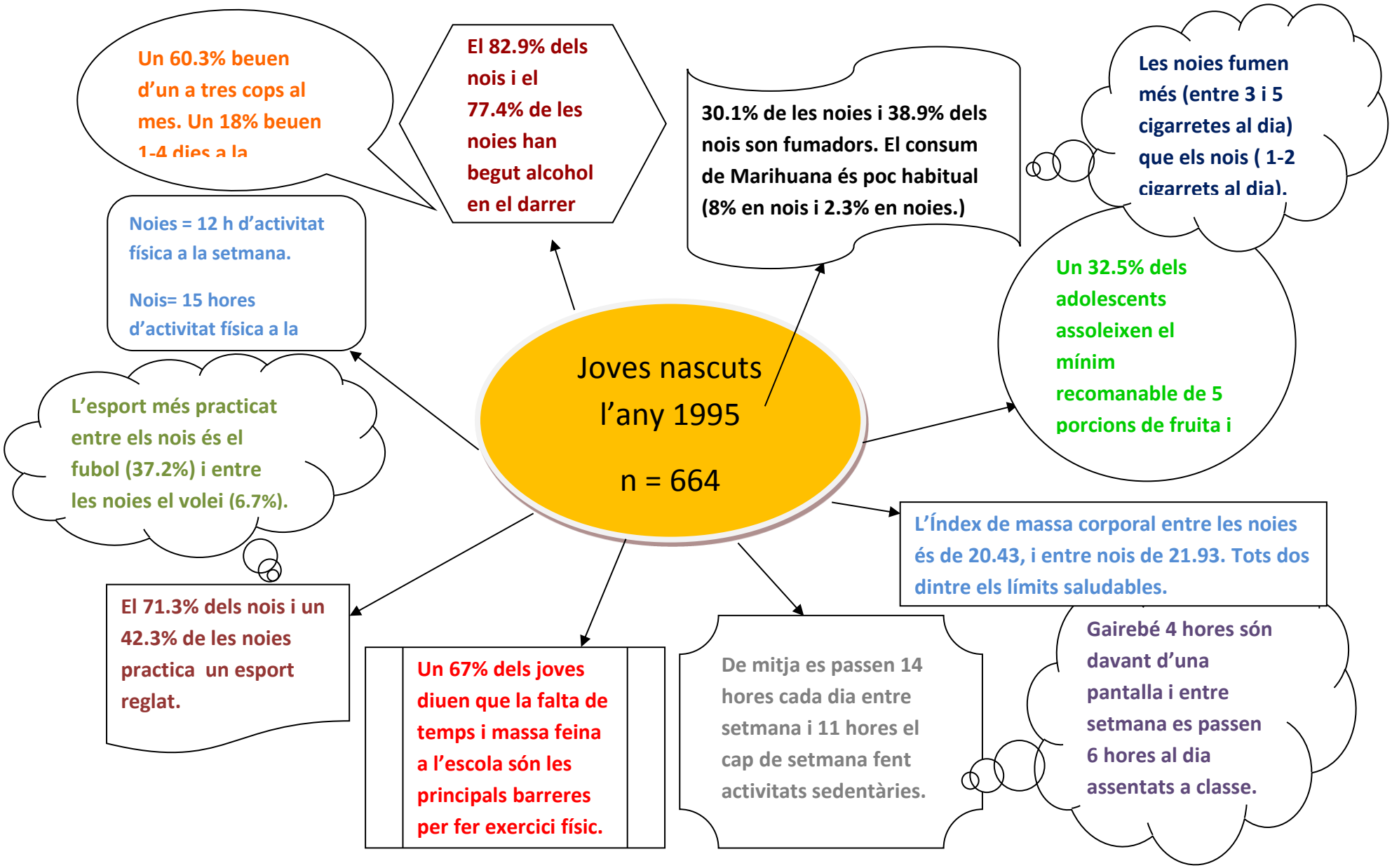
MOLTES GRÀCIES!

UZONAGen95

www.gen95.uvic.cat

Appendix 16

Information sent to all the people who completed the questionnaire during the first two years.


Un 60.3% beuen d'un a tres cops al mes. Un 18% beuen 1-4 dies a la
El 82.9% dels nois i el 77.4% de les noies han begut alcohol en el darrer
30.1% de les noies i 38.9% dels nois son fumadors. El consum de Marihuana és poc habitual (8% en nois i 2.3% en noies.)
Les noies fumen més (entre 3 i 5 cigarretes al dia) que els nois (1-2 cigarrets al dia).
Noies = 12 h d'activitat física a la setmana.
Nois= 15 hores d'activitat física a la
Un 32.5% dels adolescents assoleixen el mínim recomanable de 5 porcions de fruita i
Joves nascuts l'any 1995
n = 664
L'esport més practicat entre els nois és el fubol (37.2%) i entre les noies el volei (6.7%).
L'Índex de massa corporal entre les noies és de 20.43, i entre nois de 21.93. Tots dos dintre els límits saludables.
El 71.3% dels nois i un 42.3% de les noies practica un esport reglat.
Un 67% dels joves diuen que la falta de temps i massa feina a l'escola són les principals barreres per fer exercici físic.
De mitja es passen 14 hores cada dia entre setmana i 11 hores el cap de setmana fent activitats sedentàries.
Gairebé 4 hores són davant d'una pantalla i entre setmana es passen 6 hores al dia assentats a classe.

Resultats principals de l'estudi:

Els nois fan més exercici que les noies. Un 22% de les noies no assoleixen els mínims recomanables d'activitat física (AF) segons la Organització Mundial de la Salut (60 min al dia d'activitat física de moderada a vigorosa).

	Nois que fan + esport/AF	**Nois que fan – esport /AF**	**Noies que fan + esport /AF**	**Noies que fan - esport /AF**
Tabac		El consum és semblant en els dos grups.		Fumen més que la resta.
Fruita i Verdura	Mengen més fruita i verdura.		Mengen més fruita i verdura.	
Alcohol	Els que practiquen esport col·lectiu consumeixen més alcohol.		Beuen més que les que no fan esport.	
Barreres per la pràctica		Perceben moltes més barreres per fer exercici.		Presenten moltes més barreres per fer exercici.

Els nois es passen una mitja de 4.2 hores al dia davant d'una pantalla i les noies una mitja de 3.4 hores. Està assentat davant d'una pantalla més de dos hores al dia té efectes negatius per la salut i pot ser el causant de diverses malalties (Katzmarzyk, 2009)*.

	Nois que passen + hores davant d'una pantalla	**Nois que passen - hores davant d'una pantalla**	**Noies que passen + hores davant d'una pantalla**	**Noies que passen - hores davant d'una pantalla**
Tabac		Fumen lleugerament mes.	Fumen més.	
Fruita i Verdura	Mengen menys fruita i verdura.			Mengen més fruita i verdura.
Alcohol		Consumeixen més alcohol		Consumeixen més alcohol
Barreres per la pràctica	Mostren més barreres per fer exercici		Perceben més barreres per fer exercici	
Nivell d'AF		Fan més hores d'AF		Fan més hores d'AF

*Katzmarzyk PT, Church TS, Craig CL, Bouchard C. (2009). *Sitting time and mortality from all causes, cardiovascular disease, and cancer.* Medicine Science in Sport and Exercise. Vol. 41 (5).pp. 998-1005

Appendix 17

Interview given to the participants in 2012.

Entrevista

Bona tarda. Com pots comprovar aquesta entrevista serà enregistrada, tu intenta oblidar-te de la gravadora i parlar de la forma més lliure i natural possible. Recorda que la informació extreta en aquesta entrevista només serà utilitzada de forma anònima i confidencial. Aquesta entrevista es centrarà en les diferents temàtiques que influencien o han influenciat en la vida esportiva o sedentària dels adolescents. Explicar diferència entre AF i esport.

Comencem aquest qüestionari amb tres preguntes generals.

El teu nom?

Quina és la teva data de naixement?

Actualment estudies, treballes, ambdues coses o cap de les dues coses?

Temàtica 1: La família

- Practiquen o han practicat esport els teu pare o la teva mare? Quin? Com pot haver influenciat aquest aspecte en la teva decisió de fer o no fer esport?
- Quin és el primer record esportiu que tens? (per exemple: anar a veure un partit del barça, anar a pujar una muntanya...)
- De petit/a practicaves algun esport o feies AF amb els teus pares? Què feies? Tens un bon record d'això? Creus que pot haver influït en la teva pràctica o no pràctica actual? En quin sentit?
- Actualment els teus pares donen importància a la pràctica esportiva? Com t'afecta a tu personalment?

Temàtica 2: Classes d'educació física

- Com et prenies les classes d'educació física a l'escola? Em pots explicar la teva experiència o el record que tens de les classes d'EF? Per quins motius? (per exemple: el professor no t'agradava, eren avorrides...)
- Com creus que les classes d'EF et van afectar en el teu estil de vida general?
- Creus que les classes d'educació física et van incitar a fer més esport o per el contrari encara et van tirar més enrere? Quins factors et van influenciar?
- Hi havia amics teus a qui no els hi agradava? Com creus que haurien de ser les classes d'EF per motivar els alumnes a fer més esport?
- Trobes a faltar, ara que fas segon de batxillerat, les hores d'EF? Creus que el fet de no fer EF ha fet que no fossis tan actiu?

Temàtica 3: Amics i parella

- Els col·legues de la teva colla són físicament actius? Feu exercici junts com per exemple: partits de futbol, anar a la muntanya, anar al gimnàs...
- En cas que no siguin actius, sempre has tingut amics que no els hi agradava fer esport? I què feien?
- Creus que tenir una colla d'amics que els hi agrada l'esport pot ajudar-te a practicar més esport o tu fas esport pel teu compte?
- La majoria dels teus amics segueixen practicant esport?

- Sortiu molt de festa amb la teva colla d'amics i en cas de tenir parella, amb la teva parella? Això influeix en les hores que puguis fer esport i/o AF (per ex: els caps de setmana no faig res pq només surto de festa...)?
- Quan temps fa que sortiu de festa? Abans de sortir de festa practicaves més esport?
- De quins temes us agrada parlar amb els teus amics/gues? A on parleu normalment?
- L'esport t'ha ajudat a fer nous amics/gues? Això ha fet que t'enganxessis més a l'esport? Com?

Temàtica 4: Influència del Club (per els que fan un esport reglat)

- Des de quan estàs amb aquest Club? Quan t'hi vas iniciar i què et va ajudar a apuntar-t'hi?
- Quan et vas fent gran l'esport és cada cop més exigent, valores els sacrificis que has de fer per practicar aquest esport (per ex. Més hores d'entrenament, no sortir de festa...)? Creus que val la pena? En quin sentit?
- Com et sents/senties abans, durant i després dels entrenaments? (et feia mandra, estaves motivat per aprendre més...).
- Com t'afecta la competició i la regularitat en la pràctica d'un esport?
- T'importaria canviar de club per seguir fent la pràctica esportiva? Imagina't si has de canviar de ciutat...

Temàtica 5: Els estudis

- Com has viscut el canvi d'ESO, 1er de Batx., 2n de Batx.? En quin sentit ha estat un canvi difícil per tu?
- Has perdut hores de temps lliure? Quines coses has prioritzat? Què t'ha fet prioritzar aquestes coses?
- Els teus amics/gues han deixat de fer esport i AF després d'haver començat batxillerat? I a tu com t'ha afectat?

Temàtica 6: Els sacrificis de l'esport

- Creus que implica molts sacrificis la pràctica esportiva? Com quins?
- Això et limita a l'hora de fer esport/AF? Hi vas pensar abans de començar?
- Ara mateix prioritzes sortir amb els amics el cap de setmana abans de fer esport el diumenge al matí, per exemple? Ha estat sempre així?
- *Pels que fan AF.* Per quins motius no realitzes un esport reglat i competitiu?

Temàtica 7: Els teus gustos i temps assentat

- Què t'agrada fer? Quins són els teus ídols? Què mires per televisió?
- Et passes molta estona utilitzant el mòbil o Internet? Creus que això et treu hores d'esport i AF?
- Si posessis una llista de prioritats a on estaria l'esport i l'activitat física?
- Un dia t'aixeques amb ganes de fer esport o AF. Quins factors generals podrien influir per dissuadir-te d'aquesta decisió? (per exemple: mal temps, falta d'hàbit...)
- *Pels sedentaris.* Quins factors et podrien iniciar a la pràctica esportiva? Per quins motius començaries a fer AF i/o esport?

Temàtica 8: El lloc a on vius

- El lloc a on vius ajuda o dificulta que facis esport i/o AF (anar a caminar...)? En quin sentit?
- Què canviaries del lloc a on vius perquè poguessis fer més esport?
- Per quins motius et desplaces a peu, en bicicleta o en vehicle de motor? Creus que això canviarà un cop tinguis els 18 anys?

Temàtica 9: Estils de vida

- *En cas que fumi.* Per quins motius vas començа a fumar? El fet de fumar t'afecta o t'influeix en la teva pràctica esportiva o d'AF? Has reduït o augmentat el teu nivell d'esport des de que vas començar a fumar?
- I beure alcohol, com ha influenciat en la teva vida esportiva? Practiques esport els dissabtes o diumenges si has begut la nit abans?
- Trobes una relació directe entre el consum de tabac i alcohol amb la pràctica d'un esport? En quin sentit?
- Creus que és important un consum habitual de fruita i verdura? En quin sentit creus que és important?
- Trobes que hi pot haver una relació en fer activitat física i el consum de fruita i verdura? Quina? Fer esport ajuda a que mengis més variat?

Pregunta oberta

- Hi ha algun altre aspecte relacionat amb els teus hàbits esportius (barreres, facilitadors, gustos...) que creus que és rellevant i t'agradaria comentar?

Aquest és el final de l'entrevista. Moltes gràcies per la teva participació!

Appendix 18

Studies using IPAQ.

Autor	País i any	Subjectes and study	Metodologia	Anàlisis	Limitations and strengths IPAQ
1.Ceschini, F. Et al	Brasil. 2006	152 adolescents. Compare PA levels.	Estudi longitudinal. IPAQ short form.	Chi-Square test.	Overestimate levels of PA.
2.Hagstromer, M.	Sweden, 2005	46 healthy adults Validity of IPAQ long version.	Validity of IPAQ long.	Non-parametric Spearman correlation Bland-Atman Analysis.	Good validity for assessing intensity and total PA for healthy adolescents (15-17 Y.O). Structured PA is easier to recall. IPAQ-A can detect the least and highly active.
3.Johnson-Kozlow, M	U.S.A 2006	159 women – Breast Cancer Average = 57 Y.O. 2 quest. Comparission	IPAQ long + accelerometer	Kolmogrov-Smirnov statistic. Bland-Altman plots. Spearman correlation.	IPAQ overestimated PA by 247% - 'cause include walking of any intensity. IPAQ give accurate assessment of structured PA.
4.Lachat, C	Vietnam, 2008	227 adolescents Validació del IPAQ.	IPAQ short form.	Spearman correlation. T-test. Kappa test.	Weak validity and reliability specially in rural areas.
5.Canevari, R	Brasil, 2011	1.229 adolescents Relació entre nivells lipídics i AF.	IPAQ short form.	Test binominal per a dues variables i Test de correlació de Pearson.	
6.Arvidsson, D	Sweeden , 2005	33 adolescents Validació del qüest.	IPAQ long form.	Non Parametric analysis (Wilcoxon and Spearman's) + Bland-Altman + Man-Whitney	Large amount of unreported time. Large international surveys, where data for physical activity and related health variables are to be compared, PAQA could be useful.
7.Porchaska, J.	U.S.A, 2008	407 adults smokers PA and tobbaco use.	IPAQ short form and tobbaco use	Pearson correlation to compare PA and smoking.	The IPAQ demonstrated sensitivity to detecting changes overtime. IPAQ is particularly useful in studies targeting and assessing multiple health behaviors given concerns with respondent burden.
8.De Cocker, K. Et al.	Europe, 2011 Helena study	3051 healthy teens. To measure self reported PA.	Cross-sectional study. IPAQ long form.	ANOVA test (to compare the different IPAQ domain). Multivariate ANOVA to track differences in the PA score	The high scores could be caused by over-reporting, effected by social desirability or recall biases, a common problem of self-reports. They put a max. min/week for every domain.

				between groups. Post Hoc analysis.	
9.Janssen, I Et al.	Canada, 2004	5890 healthy teens. BMI and lifestyles	Cross-sectional study. Health behaviour in school age children survey.	Logistic Regression to examinate the association between lifestyles habits and BMI.	In these kind of studies girls were considerably more likely than boys to underreport body mass
10.Hagstromer, M	Europe, 2008 Helena Study	248 healthy teens. IPAQ validation	Validation study for the IPAQ long form for adolescents	T-test=IPAQ Vs Accelerometer. Spearman's correlation = Min.x day in each domain Vs total MET. Bland and Altman = Intensity in IPAQ Vs Accelerometer.	Inter individual variation in the understanding of the IPAQ-A concepts. A single estimate of the energy costs of a specific activity is applied to all adolescents. IPAQ-A is more valid in older teens. IPAQ-A has reasonable validity properties for assessing intensities and total PA in healthy European adolescents aged 15–17 years.
11.Tercedor, P.	Espanya, 2007	2.859 teens PA and tobbacco use	Estudi transversal, descriptiu. Qüestionari creat per l'estudi. Estudi AVENA.	Test No paramètric de Wicoxon per comparar nivells d'AF, sexe i tabac.	
12.Aarnio	Finland, 2006	4906 teens. PA and health patterns during adolescense (3 years)	Longitudinal study. Questionnaires during 3 years.	Log linear models to analyze PA with other lifestyles. Spearman's correlation to measure association between oredered variables. Logistic regression analysis to analyse PA and health related behaviours. ANOVA (significance).	According to Sirard and Pate (2001), subjective techniques such as surveys, self-report questionnaires, interviews, proxy-reports and diaries are the least reliable methods. However, subjective methods are often the only cost-efficient way to study large samples in epidemiological studies.
13.Utter, J	U.S.A 2003	4.480 teens. Sedentary behaviour Vs other PA, age, SES, ethnicity.	School-based survey.	T-Test = Seentary Vs Age, ethnicy, SES. Post-Hoc	The current study only applies to youth attending school; it may be that current findings are accentuated among

				comparison = differences between pairs of groups. Multivariate linear regression = Sedentary behaviour Vs PA.	children who are not in school.
14. Vicente-Rodríguez, G AVENA study	Espanya, 2008	1960 teens. Sedentary behaviour Vs body fat.	School-based survey. Cross sectional study.	Chi-square test - categorical variables and *t* test and Mann-Whitney test	
15. Shi, Z	China, 2006	824 teens. PA and sociodemographic factors.	School-based survey. Cross sectional study.	Chi-square tests were used to compare the frequencies. Ordinal logistic regression to model the association between PA level, and SES factors.	

Appendix 19

Internship in the Universidade Federal de Pelotas.

The PhD student, Mr. Ignasi Arumi Prat, who is currently doing the PhD program health, well being and quality of life from the Universitat de Vic (Barcelona) has spent 3 months in Brazil (February, March and April, 2013) as a part of his research studies. During these 3 months Ignasi has collaborate in different projects from the Escola Superior de Educaçao Física (ESEF) which is part of the Universidad Federal de Pelotas (UFPEL). Among other activities Ignasi has taken part in the project Educaçao Fisica+, doing an observational study during PE classes and recess time in different schools from Pelotas, using the tools SOFIT and SOPLAY. He also has helped some of the researchers in the development of some articles, participated in scientific group meeting, discussed about the development of the projects and learned about the cohort study that is running in the city of Pelotas since 1982. All the activities were supervised by me and other senior scientist. He also took 13 days to travel around the country and visit Brazil. In general we think it was a great experience and a very fruitful scholarship for Ignasi.

Yours sincerely,

Mario Renato de Azevedo Júnior, PhD.

Appendix 20

European College of Sport Science congress.

Certificate of Presentation.

European College of Sport Science e.V.
Am Sportpark Müngersdorf 6 50933 Cologne **GERMANY**
VAT-ID: DE251715668 - St.Nr.: 223/5905/0216
register of associations: VR12508
Barcelona, 02.07.2013, 15:31:17
Ignasi Arumi Prat Universitat de Vic C/ Sagrada Familia s/n 08500 Vic, Spain
Confirmation of Presentation

This is to certify that the following title(s) has/have been presented at the 18th Annual Congress of the European College of Sport Science between 26 - 29 June 2013 in Barcelona - Spain:

Abstr.-ID: 781, Presentation format: Mini-Oral , Session name: PP-PM07 - Health and Fitness [HF] 1 Title: Practicing sports at adolescence: Is it better at promoting healthy lifestyles than doing regular physical activity? Authors: Arumi Prat, I., Puig-Ribera, A., Wasley, D., Martori, J.C. Institution: Universitat de Vic. Cardiff Metropolitan Date: 27.06.2013, 01.01, Lecture room: Aula 2, No: 5

Abstr.-ID: 981, Presentation format: Mini-Oral , Session name: PP-PM13 - Health and Fitness [HF] 7 Title: Relationship between screen time, physical activity and barriers to exercise in 16-17 years-old Catalan girls. Authors: Arumi Prat, I., Puig-Ribera, A., Wasley, D., Martori, J.C. Institution: Universitat de Vic, Cardiff Metropolitan. Date: 28.06.2013, 01.01, Lecture room: Aula Magna 5, No: 8

>Institut Nacional d'Educació Física de Catalunya - INEFC, Spain

Appendix 21

5th Internation congress on physical activity and públic Health. Certificate of attendance and participation.

This is to certify that

IGNASI ARUMI PRAT

has attended and participated in the 5th International Congress on Physical Activity and Public Health (ICPAPH) that was held from April 8th through 11th, 2014, at Windsor Barra Hotel e Congressos, in Rio de Janeiro – Brazil.
Hours attended: 30 hours

This is to certify that the abstract
PRACTICING SPORTS AT ADOLESCENCE: IS IT BETTER AT PROMOTING HEALTHY LIFESTYLES THAN DOING REGULAR PHYSICAL ACTIVITY? LONGITUDINAL RESEARCH.
Of the authors: **IGNASI ARUMI PRAT; ANNA MARIA PUIG RIBERA; DAVID WASLEY; JOAN CARLES MARTORI**
has been presented in the modality of Poster in the 5th International Congress on Physical Activity and Public Health (ICPAPH) that was held from April 8th through 11th, 2014, at Windsor Barra Hotel e Congressos, in Rio de Janeiro – Brazil.
Rio de Janeiro – Brazil, April/11 of 2014

Appendix 22

Poster of the public Health conference hosted in the University of Vic in December 2013.

UVIC UNIVERSITAT DE VIC

Grup de Recerca en Esport i Activitat Física

Grup de Recerca en Alimentació Salut i Benestar

Facultat d'Educació, Traducció i Ciències Humanes

Facultat de Ciències de la Salut i el Benestar

Xerrada-Col·loqui

12 de desembre. Sala Segimon Serrallonga UVic

Salut per a tots els públics

09:30 Dr. David Wasley (Director del master AF i salut a la Cardiff Metropolitan University).

Estratègies per promocionar i mantenir una població activa.

10:30 Sr. Joan Codina (President de la fàbrica de somnis Vic-Sud).

Activitat física dintre d'un marc alternatiu.

11:30 Dra. Carmen Pérez (SENC (Sociedad Española de Nutrición Comunitaria)).

Experiències de promoció de l'alimentació i l'activitat física saludable en el medi escolar.

12:30 Sra. Gemma Salvador (Dietista-Nutricionista. Agència de Salut Pública de Catalunya)

Menjar sa amb menys pressupost.

13:15 Taula rodona. Modera Dra. Anna Mª Puig (Especialista en promoció de la salut).
Estratègies conjuntes per promocionar l'activitat física i l'alimentació.

Per a més informació:www.uvic.cat/[node]
Contacte: [Ignasi Arumí] / [ignasi.arumi@uvic.cat] / Tel. [938861222 (8321)]