

Active Life Style: A Review Study

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Abstract

The concept of lifestyle is commonly used as something that needs to be changed if we want to achieve a sustainable development. But what does the concept of lifestyle mean? How is it defined? Educators and politicians, among others, need a definition to use the concept and understand how it is related to sustainable development. As reported by the World Health Organization (WHO.2018), the adult disease burden is due to health risk behaviors that start during adolescence (e.g., unhealthy eating practices). Diseases of the age that are most often mentioned and have an, association with physical inactivity include obesity, diabetes, heart disease, and some cancers. Facilitators to physical activity include Environment, Family and Society, Cultural and Social Traditions, Financial Status, Life Goals/ Ambitions, Support System and Opportunities, Job Requirements. Maintaining Active Lifestyle is a fundamental aspect of Lifestyle management and includes self-management education (SME), physical activity, nutrition, Adequate Rest and sleep Pattern, personal hygiene, smoking cessation counseling, and psychosocial care and Stress coping Strategies. An active lifestyle is great for your overall health. Since physical activity engages entire mind and body, there are several positive benefits one can notice when you lead an active lifestyle

Introduction

The term is widely used in the media and in research on sustainable development and health. It seems as if the concept is taken for granted, Just meaning manner of living or way of living. The Latin expression *modus vivendi* means Manner/way of living but should be understood in terms of values and attitudes. Values and Attitudes – since the ancient Greeks – are something the younger generation inherits from the older generation. Today the picture is more complex. One's values and attitudes are influenced by child culture milieus, youth culture milieus and multicultural milieus and we are also influenced by the media and globalization. All these different influences put a pressure on us to buy and use arte facts that directly or indirectly cause environmental problems. The argument presented here is that we have to understand lifestyle in a pluralistic way. In the field of sociology, as in other fields, the concept is often used to mean one of many Lifestyles. An individual can, in the form of different practices, express him- or herself through many lifestyles. The concept of lifestyle is commonly referred to as something that needs to be changed if we want to achieve a sustainable development. The very central question in this essay is whether lifestyle is a useful concept at all when related to sustainable development. If it is, is it Possible to use one definition or do we need several definitions? The argumentation presented in this paper highlights the need to define the concept of lifestyle on various levels, thus using Plural definitions, in order to enable a constructive discussion and avoid misunderstandings. Environmental problems are sometimes pointed out to be lifestyle problems. At the 94th Indian Science Congress

Prime Minister Manmohan Singh declared that ‘we in the Developing world cannot afford to ape the West in terms of its environmentally wasteful Lifestyle.’

The problem with the concept of lifestyle is that it is defined in many different ways or not defined At all. Some (social) researchers use the concept of lifestyle to mean how you live your life or how you want to live your life (e.g. Pulkkinen & Kokko 2000), which is very similar to way of life. Others mean that lifestyle is the sum of health-related factors (such as tobacco, alcohol, drugs, fat, sugar, Exercise) (Cockerham 2002; Bolt 2002). Still others say that lifestyle is very much what you Consume (Stoll-Kleemann et al. 2001; Connolly & Prothero 2003; Michaelis 2003; San Juan 2003; Poster 2004). Many writers do not bother to describe what they mean at all.

The concept is in fact used (by media and researchers) on four different levels: (1) the Global level, (2) the structural or national level, (3) the positional or sub-cultural level and (4) The individual level. When we use the concept of lifestyle we have to be clear as to what level The analysis is on, and on what level we may expect problems (related to the concept) to be Solved. Using these four levels, definitions of the concept of lifestyle could thus appear as Shown in Table I.

Table I. Definitions of the concept of lifestyle.

1 – Global: Lifestyle is the manifestation of a world consumption class (also called North and South or West and something opposite) regulated by the supply of goods and the amount of consumption

2 – Structural or national: Lifestyle is the manifestation of nationalism, which is regulated, planned and influenced primarily by the government. Thus, a national lifestyle is patterns of action and expressions that differentiate one nation from another and at the same time connect those within the nation.

3 – Positional or sub-cultural: Lifestyle is the routine manifestation of subcultures, regulated and influenced by family (social class), friends (status Groups, gender, generation) and different types of movements and networks. By this we can say that the lifestyle visually differentiates one subculture from another or from culture in the broader sense. Likewise, the lifestyle visually

Expresses a connection within the group

4a – Individual: Lifestyle is the routinized manifestation of self-identity (not the broader sense of identity used by, e.g. Castells 1997), Regulated by the project of self and influenced primarily by friends and the media (according to Giddens 1991, the Project is influenced by group pressure, role models and socio-economic circumstances). Lifestyle is the visual Expression that differentiates one individual from another. The lifestyle also indicates, reflexively, to the individual that the project of self is ongoing. When it comes to consumption it can be understood as follows: Lifestyle is a Manifestation or expression of self-identity, and consumption is a method for maintaining this lifestyle.

4b – Individual: A lifestyle is a pattern of repeated acts that are both dynamic and to some degree the individual is oblivious to, and which involves the use of artifacts. This lifestyle is grounded in beliefs about the world, and its constancy over time is guided by intentions to attain goals. In other words, a lifestyle is a set of habits that are directed by the same main goal. It is regulated by (social) feedback and by access to artifacts

As reported by the World Health Organization (WHO.2018), the adult disease burden is due to health risk behaviors that start during adolescence (e.g., unhealthy eating

practices). For example, most of the United States (US) population does not consume the recommended daily amount of fruit and vegetables, nuts, and seeds. On the other hand, the consumption of added sugars, processed meats, and trans fats is higher than the recommended daily intake (Blondin, S.A.;2016). It has been shown that after the transition from adolescence to young adulthood, when independency increases, young adults are continuously challenged to make healthful food choices (LaCaille, L.J.;2011, . Stok, F.M.;2018). Along with unhealthy eating behaviors, a new series of weight-related behavioral patterns begins throughout this period, such as excessive alcohol consumption and a low level of physical activity. Substantial life-changing transitions happened when young adults finish high school to start college or a working life (Stok, F.M.;2018). According to the literature (Crombie, A.P.; Ilich, **2009**, Vella-Zarb, R.A.; Elgar, **2009**, Racette, S.B.; **2008**, 40, 39–42.), university is a critical period for young adults regarding food choices and their relationship with weight gain. Some studies have even shown that college students tend to gain more weight than those who do not attend university (Mokdad, A.H.; **1999**) In order to design and support healthy nutrition campaigns (e.g., less meat options) across campuses, it is critical to improve knowledge of dietary behaviors in the university-age population (Mueller, M.P.;2018). In the last decades, there has been growing interest in the development and implementation of health promotion interventions in the workplace (McLeroy, K.R.;1988). Studies exploring eating behavior in children (O’Dea, J.A.**2003**), adolescents (Nelson, M.C.;2009, Tiedje, K.;2014), and young adults (Ashton, L.M.;2015) have been done in recent years; however, theories to explain such behaviors are still moving from the nascent to the mature stage (Edmondson, A.C.2017)

Active lifestyle or Physical activity is an important component of lifestyle intervention and should be systematically included in lifestyle management components (Vella-Zarb, R.A.;2009). Physical activity, self-monitoring, and continued follow-up contacts have been identified as key components of weight control (Ashton, L.M.; 2015). In addition, several studies showed that PA presents several benefits in individuals with class II and III obesity (Edmondson, A.C.2017,), as well as in class I: improvement of morbidities, cardiovascular diseases mortality and quality of life (Edmondson, A.C.2017, Sallis, J.; 2015, Morgan, D.L. 1996, . Guerrero, L.; 2018, . Berg, B.L.; 2004). However, non-surgical obesity programs in Canada include less PA support compared to nutritional support (73 vs. 93%) and have less PA professionals compared to dietitians (43 vs. 74%) (Creswell, J.W.1998).

Facilitators of Active life Style

Facilitators to active life style include Environment, Family and Society, Cultural and Social Traditions, Financial Status, Life Goals/ Ambitions, Support System and Opportunities, Job Requirements. Other Facilitators to physical activity included building physical activity into daily routines; social support; and affordable and accessible fitness venues. Building physical activity into daily routines was reported by many of the women. Women reported that they received a lot of their physical activity through yard work, gardening, and household chores. Some women consciously modified their normal habits to actively incorporate more physical activity into their daily lives. Many people report that their pets keep them active. In addition, living in a small community allows interaction among people who have common interests which further promotes physical

activity. Access to affordable physical activity venues contributes to the promotion of physical activity within communities. On the other hand, Barriers to active lifestyle included lack of time and competing priorities; cost of healthy food; adjusting habits to favor a healthier diet; and geographic isolation.(Rebecca Seguin,2014)

Maintaining Active Lifestyle

Maintaining Active Lifestyle is a fundamental aspect of Lifestyle management and includes self-management education (SME) , physical activity, nutrition , Adequate Rest and sleep Pattern, personal hygiene, smoking cessation counseling, and psychosocial care and Stress coping Strategies. One should focus on how to optimize lifestyle from the time of the initial comprehensive medical evaluation, throughout all subsequent evaluations and follow-up, and during the assessment of complications and management of co morbid conditions in order to enhance any chronic disease care. (American Diabetes Association Diabetes Care 2017)

SME programs facilitate the knowledge, skills, and abilities necessary for optimal self-care and incorporate the needs, goals, and life experiences of the person. The overall objectives of SME is to support informed decision making, self-care behaviors, problem solving, and active collaboration with the health care team to improve clinical outcomes, health status, and quality of life in a cost-effective manner (Powers MA,2015). Four critical time points have been defined when the need for SME should be evaluated by the medical care provider and/or multidisciplinary team, with referrals made as needed (Powers MA,2015): At diagnosis, Annually for assessment of education, nutrition, and emotional needs, When new complicating factors (health conditions, physical limitations, emotional factors, or basic living needs) arise that influence self-management, When transitions in care occur SME focuses on supporting patient empowerment by providing people with diabetes the tools to make informed self-management decisions (Marrero DG,2013).

Goals of Nutrition

1. To promote and support healthful eating patterns, emphasizing a variety of nutrient-dense foods in appropriate portion sizes, in order to improve overall health and specifically to: Achieve and maintain body weight goals, Attain individualized glycemic, blood pressure, and lipid goals, Delay or prevent the complications of diabetes.
2. To address individual nutrition needs based on personal and cultural preferences, health literacy and numeracy, access to healthful foods, willingness and ability to make behavioral changes, and barriers to change
3. To maintain the pleasure of eating by providing nonjudgmental messages about food choices
4. To provide an individual with diabetes the practical tools for developing healthy eating patterns rather than focusing on individual macronutrients, micronutrients, or single foods

Body weight management is important for overweight and obese people with type 1 and type 2 diabetes. Lifestyle intervention programs should be intensive and have frequent follow-up to achieve significant reductions in excess body weight and improve clinical indicators. There is strong and consistent evidence that modest persistent weight loss can delay the progression from prediabetes to type 2 diabetes (Mudaliar U, 2016, Balk EM, 2015) and is beneficial to the management of type 2 diabetes

In overweight and obese patients with type 2 diabetes, modest weight loss, defined as sustained reduction of 5% of initial body weight, has been shown to improve glycemic control and to reduce the need for glucose-lowering medications (UK Prospective Diabetes Study, 1990, Goldstein DJ, 1992, Pastors JG, 2002). Sustaining weight loss can be challenging (. Franz MJ, 2015). Weight loss can be attained with lifestyle programs that achieve a 500–750 kcal/day energy deficit or provide ~1,200–1,500 kcal/day for women and 1,500–1,800 kcal/day for men, adjusted for the individual's baseline body weight. For many obese individuals with type 2 diabetes, weight loss >5% is needed to produce beneficial outcomes in glycemic control, lipids, and blood pressure, and sustained weight loss of $\geq 7\%$ is optimal (. Franz MJ, 2015).

The diets used in intensive lifestyle management for weight loss may differ in the types of foods they restrict (e.g., high-fat vs. high-carbohydrate foods), but their emphasis should be on nutrient-dense foods, such as whole grains, vegetables, fruits, legumes, low-fat dairy, lean meats, nuts, and seeds, as well as on achieving the desired energy deficit (. Sacks FM, 2009, de Souza RJ, 2012, Johnston BC, 2014, Fox CS, Golden SH 2015). The diet choice should be based on the patients' health status and preferences.

Physical activity

Physical activity is a general term that includes all movement that increases energy use and is an important part of the diabetes management plan. Exercise is a more specific form of physical activity that is structured and designed to improve physical fitness. Both physical activity and exercise are important. Exercise has been shown to improve blood glucose control, reduce cardiovascular risk factors, contribute to weight loss, and improve well-being. Physical activity is as important for those with type 1 diabetes as it is for the general population, but its specific role in the prevention of diabetes complications and the management of blood glucose is not as clear as it is for those with type 2 diabetes.

- Children and adolescents with type 1 or type 2 diabetes or prediabetes should engage in 60 min/day or more of moderate- or vigorous-intensity aerobic activity, with vigorous muscle-strengthening and bone-strengthening activities at least 3 days/week.
- Most adults with with type 1 and type 2 diabetes should engage in 150 min or more of moderate-to-vigorous intensity physical activity per week, spread over at least 3 days/week, with no more than 2 consecutive days without activity. Shorter durations (minimum 75 min/week) of vigorous-intensity or interval training may be sufficient for younger and more physically fit individuals.
- Adults with type 1 and type 2 diabetes should engage in 2–3 sessions/week of resistance exercise on nonconsecutive days.
- All adults, and particularly those with type 2 diabetes, should decrease the amount of time spent in daily sedentary behavior. Prolonged sitting should be interrupted every 30 min for blood glucose benefits, particularly in adults with type 2 diabetes.

- Flexibility training and balance training are recommended 2–3 times/week for older adults. Yoga and tai chi may be included based on individual preferences to increase flexibility, muscular strength, and balance.

Results from epidemiological, case-control, and cohort studies provide convincing evidence to support the causal link between cigarette smoking and health risks (Suarez L 2016). Recent data show tobacco use is higher among adults with chronic conditions. Other studies of individuals with diabetes consistently demonstrate that smokers (and people exposed to secondhand smoke) have a heightened risk of CVD, premature death, and microvascular complications.

The routine and thorough assessment of tobacco use is essential to prevent smoking or encourage cessation. Numerous large randomized clinical trials have demonstrated the efficacy and cost-effectiveness of brief counseling in smoking cessation, including the use of telephone quit lines, in reducing tobacco use. For the patient motivated to quit, the addition of pharmacological therapy to counseling is more effective than either treatment alone. Special considerations should include assessment of level of nicotine dependence, which is associated with difficulty in quitting and relapse (Ranney L, 2006; 120.). Although some patients may gain weight in the period shortly after smoking cessation, recent research has demonstrated that this weight gain does not diminish the substantial CVD benefit realized from smoking cessation (Clair C, 2013).

Nonsmokers should be advised not to use e-cigarettes. There are no rigorous studies that have demonstrated that e-cigarettes are a healthier alternative to smoking or that e-cigarettes can facilitate smoking cessation. More extensive research of their short- and long-term effects is needed to determine their safety and their cardiopulmonary effects in comparison with smoking and standard approaches to smoking cessation (Schraufnagel DE, 2014, Bam TS, 2014, Bhatnagar A, 2014).

Emotional well-being is an important part of lifestyle management. Psychological and social problems can impair the individual's (Anderson RJ, 2002, Delahanty LM, 2007; Anderson RJ, 2001) or family's (Kovacs Burns K, 2013) ability to carry out diabetes care tasks and therefore potentially compromise health status. There are opportunities for the clinician to routinely assess psychosocial status in a timely and efficient manner for referral to appropriate services. A systematic review and meta-analysis showed that psychosocial interventions modestly but significantly improved A1C (standardized mean difference -0.29%) and mental health outcomes (Harkness E, 2010). However, there was a limited association between the effects on A1C and mental health, and no intervention characteristics predicted benefit on both outcomes.

Advantages of Active Lifestyle

It is no secret that leading an active lifestyle is great for your overall health. However, you may be interested in the specific mental and physical benefits you receive when you are remaining active. Since physical activity engages your entire mind and body, there are several positive benefits you will notice when you lead an active lifestyle. Once you begin any physical activity, your mind is also getting a great workout so to say. There are several ways your mind will benefit from staying active. Some of the mental health benefits include: Reducing Stress, Improving Self-Confidence, Sharpening Your Memory, Increasing Relaxation, and Preventing Cognitive Decline. Getting your body moving will enable you to gain several physical health benefits. Leading an active

lifestyle will not only keep you in shape, it will keep your body healthy. A few ways you will see physical benefits from an active lifestyle are: Controlling Your Weight, Combating Disease, Boosting Your Energy, Sleeping Better. All in all, regular exercise can offer several mental and physical health benefits. Take advantage of your health and your lifestyle by getting active today, the overall health benefits will be seen in no time (<https://www.lifeoptimizer.org/2016/08/09/health-benefits-active-lifestyle/>)

Conclusions

Lifestyle is the set of habits and choices that an individual constructs in order to remain secure. A concluding remark then may be that one lifestyle is a solution to a problem for the individual and at the same time, a bigger problem on a higher societal level. Looking from a higher level, the individual lifestyle is non-sustainable. Lifestyle is strongly associated with many factors. “Being a healthy person” was not just exercising and eating healthy foods, but also taking time for yourself and being an overall happy individual. Lifestyle interventions incorporating a physical activity component can improve weight and various cardio metabolic risk factors in individuals. However, further high quality trials are needed to confirm this evidence.

References

- 14. Mokdad, A.H.; Serdula, M.K.; Dietz, W.H.; Bowman, B.A.; Marks, J.S.; Koplan, J.P. The spread of the obesity epidemic in the United States, 1991–1998. *JAMA* **1999**, *282*, 1519–1522. *Nutrients* **2018**, *10*, 1823–1836.
- 15. Mueller, M.P.; Blondin, S.A.; Korn, A.R.; Bakun, P.J.; Tucker, K.L.; Economos, C.D. Behavioral Correlates of Empirically-Derived Dietary Patterns among University Students. *Nutrients* **2018**, *10*, 716.
- Adler A. 1924. The practice and theory of individual psychology. London: Kegan Paul.
- American Diabetes Association Diabetes Care 2017 Jan; 40(Supplement 1): S33–S43. <https://doi.org/10.2337/dc17-S007>
- Anderson RJ, Freedland KE, Clouse RE, Lustman PJ. The prevalence of comorbid depression in adults with diabetes: a meta-analysis. *Diabetes Care* 2001;24:1069–1078
- Anderson RJ, Grigsby AB, Freedland KE, et al. Anxiety and poor glycemic control: a meta-analytic review of the literature. *Int J Psychiatry Med* 2002;32:235–247
- Ashton, L.M.; Hutchesson, M.J.; Rollo, M.E.; Morgan, P.J.; Thompson, D.I.; Collins, C.E. Young adult males’ motivators and perceived barriers towards eating healthily and being active: A qualitative study. *Int. J. Behav. Nutr. Phys. Act.* **2015**, *12*, 93.
- Balk EM, Earley A, Raman G, Avendano EA, Pittas AG, Remington PL. Combined diet and physical activity promotion programs to prevent type 2 diabetes among persons at increased risk: a systematic review for the Community Preventive Services Task Force. *Ann Intern Med* 2015;164: 164–175

- Bam TS, Bellew W, Berezhnova I, et al.; Tobacco Control Department International Union Against Tuberculosis and Lung Disease. Position statement on electronic cigarettes or electronic nicotine delivery systems. *Int J Tuberc Lung Dis* 2014;18:5–7
- Bell D, Hollows J (eds). 2005. *Ordinary lifestyles. Popular media, consumption and taste*. Maidenhead, UK: Open University Press.
- Berg, B.L.; Lune, H.; Lune, H. *Qualitative Research Methods for the Social Sciences*; Pearson: Boston, MA, USA, 2004; Volume 5.
- Bhatnagar A, Whitsel LP, Ribisl KM, et al.; American Heart Association Advocacy Coordinating Committee, Council on Cardiovascular and Stroke Nursing, Council on Clinical Cardiology, and Council on Quality of Care and Outcomes Research. Electronic cigarettes: a policy statement from the American Heart Association. *Circulation* 2014;130:1418–1436
- Blondin, S.A.; Mueller, M.P.; Bakun, P.J.; Choumenkovitch, S.F.; Tucker, K.L.; Economos, C.D. Cross-Sectional Associations between Empirically-Derived Dietary Patterns and Indicators of Disease Risk among University Students. *Nutrients* **2016**, 8, 3.
- Bolt HM. 2002. Occupational versus environmental and lifestyle exposures of children and adolescents in the European Union. *Toxicol Lett* 127:121 – 126. 72 M. Jensen
- Castells M. 1997. *The information age: Economy, society and culture*. Vol. 2, *The power of identity*. Malden, MA: Blackwell.
- Clair C, Rigotti NA, Porneala B, et al. Association of smoking cessation and weight change with cardiovascular disease among adults with and without diabetes. *JAMA* 2013;309:1014–1021
- Cockerham WC. 2002. Health lifestyles in Russia. *Soc Sci Med* 51:1313 – 1324.
- Connolly J, Prothero A. 2003. Sustainable consumption: consumption, consumers and the commodity discourse. *Consumpt Markets Cult* 6:275 – 291.
- Creswell, J.W. *Qualitative inquiry and research design: Choosing among five approaches*. *Health Promot. Pract.* **1998**, 16, 473–475.
- Crombie, A.P.; Ilich, J.Z.; Dutton, G.R.; Panton, L.B.; Abood, D.A. The freshman weight gain phenomenon revisited. *Nutr. Rev.* **2009**, 67, 83–94.
- De Souza RJ, Bray GA, Carey VJ, et al. Effects of 4 weight-loss diets differing in fat, protein, and carbohydrate on fat mass, lean mass, visceral adipose tissue, and hepatic fat: results from the POUNDS LOST trial. *Am J Clin Nutr* 2012;95:614–625
- Delahanty LM, Grant RW, Wittenberg E, et al. Association of diabetes-related emotional distress with diabetes treatment in primary care patients with type 2 diabetes. *DiabetMed* 2007;24:48–54
- Edmondson, A.C.; McManus, S.E. Methodological fit in management field research. *Acad. Manag. Rev.* **2017**, 32, 1246–1264.
- Fox CS, Golden SH, Anderson C, et al.; American Heart Association Diabetes Committee of the Council on Lifestyle and Cardiometabolic Health; Council on Clinical Cardiology, Council on Cardiovascular and Stroke Nursing, Council on Cardiovascular Surgery and Anesthesia, Council on Quality of Care and Outcomes

- Research; American Diabetes Association. Update on prevention of cardiovascular disease in adults with type 2 diabetes mellitus in light of recent evidence: a scientific statement from the American Heart Association and the American Diabetes Association. *Diabetes Care* 2015;38:1777–1803
- Franz MJ, Boucher JL, Rutten-Ramos S, VanWormer JJ. Lifestyle weight-loss intervention outcomes in overweight and obese adults with type 2 diabetes: a systematic review and meta-analysis of randomized clinical trials. *J Acad Nutr Diet* 2015;115:1447–1463
 - Giddens A. 1986. *The constitution of society*. Berkeley: University of California Press.
 - Giddens A. 1990. *The consequences of modernity*. Cambridge, UK: Polity in association with Blackwell.
 - Giddens A. 1991. *Modernity and self-identity. Self and society in the late modern age*. Cambridge, UK: Polity Press.
 - Goldstein DJ. Beneficial health effects of modest weight loss. *Int J Obes Relat Metab Disord* 1992;16:397–415
 - Guerrero, L.; Xicola, J. New Approaches to Focus Groups. In *Methods in Consumer Research, Volume 1: New Approaches to Classic Methods*; Ares, G., Varela, P., Eds.; Woodhead Publishing: Sawston, CA, USA, 2018; pp. 49–77. ISBN 9780081020890.
 - Harkness E, Macdonald W, Valderas J, Coventry P, Gask L, Bower P. Identifying psychosocial interventions that improve both physical and mental health in patients with diabetes: a systematic review and meta-analysis. *Diabetes Care* 2010;33:926–930
 - <https://www.lifeoptimizer.org/2016/08/09/health-benefits-active-lifestyle/>
 - Jankowich M, Choudhary G, Taveira TH, Wu W-C. Age-, race-, and gender-specific prevalence of diabetes among smokers. *Diabetes Res Clin Pract* 2011;93:e101–e105
 - Johnston BC, Kanters S, Bandayrel K, et al. Comparison of weight loss among named diet programs in overweight and obese adults: a meta-analysis. *JAMA* 2014;312:923–933
 - Kovacs Burns K, Nicolucci A, Holt RIG, et al.; DAWN2 Study Group. Diabetes Attitudes, Wishes and Needs second study (DAWN2_): cross-national benchmarking indicators for family members living with people with diabetes. *Diabet Med* 2013;30:778–788
 - LaCaille, L.J.; Nichols Dauner, K.N.; Krambeer, R.J.; Pedersen, J. Psychosocial and Environmental Determinants of Eating Behaviors, Physical Activity, and Weight Change Among College Students: A Qualitative Analysis. *J. Am. Coll. Health* 2011, 59, 531–538.
 - Marrero DG, Ard J, Delamater AM, et al. Twenty-first century behavioral medicine: a context for empowering clinicians and patients with diabetes: a consensus report. *Diabetes Care* 2013;36:463–470
 - McLeroy, K.R.; Bibeau, D.; Steckler, A.; Glanz, K. An ecological perspective on health promotion programs. *Health Educ. Q.* 1988, 15, 351–377.

- Michaelis L. 2003. Sustainable consumption and greenhouse gas mitigation. *Clim Pol* 3S1:135 – 146.
- Morgan, D.L. *Focus Groups as Qualitative Research*; Sage Publications: Thousand Oaks, CA, USA, 1996; Volume 16.
- Mudaliar U, Zabetian A, Goodman M, et al. Cardiometabolic risk factor changes observed in diabetes prevention programs in US settings: a systematic review and meta-analysis. *PLoS Med* 2016;13:e1002095
- Nelson, M.C.; Kocos, R.; Lytle, L.A.; Perry, C.L. Understanding the perceived determinants of weight-related behaviors in late adolescence: A qualitative analysis among college youth. *J. Nutr. Educ. Behav.* **2009**, 41, 287–292.
- O’Dea, J.A. Why do kids eat healthful food? Perceived benefits of and barriers to healthful eating and physical activity among children and adolescents. *J. Am. Diet. Assoc.* **2003**, 103, 497–501.
- Pastors JG, Warshaw H, Daly A, Franz M, Kulkarni K. The evidence for the effectiveness of medical nutrition therapy in diabetes management. *Diabetes Care* 2002;25:608–613
- Poster M. 2004. Consumption and digital commodities in the everyday. *Cult Stud* 18:409 – 423.
- Powers MA, Bardsley J, Cypress M, et al. Diabetes self-management education and support in type 2 diabetes: a joint position statement of the American Diabetes Association, the American Association of Diabetes Educators, and the Academy of Nutrition and Dietetics. *Diabetes Care* 2015;38:1372–1382
- Pulkkinen L, Kokko K. 2000. Identity development in adulthood: A longitudinal study. *J Research in Personality* 34:445 – 470.
- Racette, S.B.; Deusinger, S.S.; Strube, M.J.; Highstein, G.R.; Deusinger, R.H. Changes in weight and health behaviors from freshman through senior year of college. *J. Nutr. Educ. Behav.* **2008**, 40, 39–42.
- Ranney L, Melvin C, Lux L, McClain E, Lohr KN. Systematic review: smoking cessation intervention strategies for adults and adults in special populations. *Ann Intern Med* 2006;145: 845–856
- Rebecca Seguin, Leah Connor, Miriam Nelson, Andrea LaCroix, Galen Eldridge, J Nutr Metab. 2014; 2014: 146502. Published online 2014 Dec 11. doi: 10.1155/2014/146502 PMID: PMC4276670
- Sacks FM, Bray GA, Carey VJ, et al. Comparison of weight-loss diets with different compositions of fat, protein, and carbohydrates. *N Engl J Med* 2009;360:859–873
- Sallis, J.; Owen, N. Ecological models of health behavior. In *Health Behaviour: Theory, Research and Practice*, 5th ed.; Glanz, K., Rimer, B., Viswanath, K., Eds.; Jossey-Bass: San Francisco, CA, USA, 2015.
- San Juan E Jr. 2003. Challenging the theory and practice of contemporary American Studies. *Rev Educ Pedagogy*
- Schraufnagel DE, Blasi F, Drummond MB, et al.; Forum of International Respiratory Societies. Electronic cigarettes. A position statement of the Forum of International Respiratory Societies. *Am J Respir Crit Care Med* 2014;190:611–618

- Stanton CA, Keith DR, Gaalema DE, et al. Trends in tobacco use among US adults with chronic health conditions: National Survey on Drug Use and Health 2005-2013. *Prev Med* 2016;92:160–168
- Stok, F.M.; Renner, B.; Clarys, P.; Deliens, T. Understanding Eating Behavior during the Transition from Adolescence to Young Adulthood: A Literature. *Nutrients* **2018**, 10, 667.
- Stoll-Kleemann S, O’Riordan T, Jaeger CC. 2001. The psychology of denial concerning climate mitigation measures: evidence from Swiss focus groups. *Global Environ Change* 11:107 – 117.
- Suarez L, Barrett-Connor E. Interaction between cigarette smoking and diabetes mellitus in the prediction of death attributed to cardiovascular disease. *AmJ Epidemiol* 1984;120:670– 675
- Tiedje, K.; Wieland, M.L.; Meiers, S.J.; Mohamed, A.A.; Formea, C.M.; Ridgeway, J.L.; Asiedu, G.B.; Boyum, G.; Weis, J.A.; Nigon, J.A.; et al. A focus group study of healthy eating knowledge, practices, and barriers among adult and adolescent immigrants and refugees in the United States. *Int. J. Behav. Nutr. Phys. Act.* **2014**, 11, 63.
- UK Prospective Diabetes Study 7. UK Prospective Diabetes Study 7: response of fasting plasma glucose to diet therapy in newly presenting type II diabetic patients, UKPDS Group. *Metabolism* 1990;39:905–912
- Vella-Zarb, R.A.; Elgar, F.J. The ‘freshman 5’: A meta-analysis of weight gain in the freshman year of college. *J. Am. Coll. Health* **2009**, 58, 161–166.
- Voulgari C, Katsilambros N, Tentolouris N. Smoking cessation predicts amelioration of microalbuminuria in newly diagnosed type 2 diabetes mellitus: a 1-year prospective study. *Metabolism* 2011;60:1456–1464
- WHO. Young people: Health Risks and Solutions. 2014 Fact Sheet N_345. Available online: <http://www.searo.who.int/thailand/factsheets/fs0027/en/> (accessed on 15 July 2018).
- Young-Hyman D, de Groot M, Hill-Briggs F, Gonzalez JS, Hood K, Peyrot M. Psychosocial care for people with diabetes: a position statement of the American Diabetes Association. *Diabetes Care* 2016;39:2126–2140