

Health coaching as an intervention for picky eaters

ABSTRACT

Although childhood “picky eating” or “fussy eating” or “food neophobia” is well established as a subject of research, commentary and treatment guidelines, there is very little published research exploring the origins and basis of adult food neophobia, much less its treatment. Existing treatment guidelines for picky eating tend to focus on cognitive behavioral interventions. The consequences of picky eating, although not extensively researched, include inadequate nutrition and weight management difficulties – both significant contributors to the worldwide disease burden. Health coaching has a focus on personal choice, reflection on previous successes and current strengths, as well as identification of a personal health vision and achievable goals. As such, it may play a useful role in supporting behavioral change in adult picky eaters. A structured intervention, rooted in health coaching skills and culinary medicine aimed at supporting such change, is proposed.

INTRODUCTION

Picky eating (also known as fussy eating or food neophobia) is generally under-studied in adult populations.(1)(2) Research in the area is frustrated by lack of clear definition of the term. This therefore frustrates a more complete understanding of the health and disease risk consequences of picky eating. Despite this picky eating may lead to poor nutrition as well as weight management difficulty. Preliminary evidence suggests that picky eating is frequently present with comorbid diabetes, hypercholesterolemia, hypertriglyceridemia, reflux and sleep apnea.(3) The scarcity of research in the area is a constraining factor in the development of treatment options for picky eating. In general treatment guidelines are limited in their scope.(4) Notwithstanding this context, there is a pressing need to pursue treatment options for adults presenting with picky eating. Overweight and obesity, in addition to diet related non-communicable diseases form part of the World Health Organization (WHO) definition of malnutrition. (5) Together, these outcomes are a significant component of disease burden for communities, states and nations.(6) Health coaching, including supported approaches to dietary pattern change and culinary medicine, has been shown to improve outcomes(7) for clients presenting with overweight and obesity. Based on the evidence for its use with these populations’ health coaching, is proposed as a means to engage patients in supported behavioral change for picky eating.

WHAT IS PICKY EATING?

There is a great deal of discussion in the literature concerning “picky eating”, “fussy eating” and “food neophobia”; yet the current literature can be difficult to parse usefully. This is due to the variability in terminology noted above and the general lack of definitional agreement about what “picky” and “fussy” eating actually are.(4) For simplicity, the term

“picky eating” will be used here. Furthermore, the existing terminology encompasses everything from idiosyncratic eating behaviour through to significant clinical disorder. The 2013 Diagnostic and Statistical Manual of Mental Disorders features the new diagnosis “Avoidant/Restrictive Food Intake Disorder” (ARFID).(8) The diagnostic criteria for ARFID require one or more of weight loss, tube or supplement feeding, nutritional deficiency and psychosocial interference. These are not necessarily observed in people who engage in picky eating. In other words, all those meeting diagnostic criteria for ARFID are likely to be picky eaters, but not all picky eaters have ARFID. Consequently, the existence of such a diagnostic category may not be helpful in understanding the breadth of adult “picky eating”.

From the author’s practice experience, picky eating can take on a number of forms. It may relate to the texture, aroma, flavor, color, spiciness and/or liquidity of food. Anecdotally, picky eating often appears to have familial origins. Particular foods may be associated with unpleasant childhood experiences (for example being forced to eat boiled brussels sprouts). Over time, this specific dislike may generalize into “green vegetables” or even “all vegetables”. By the time of adulthood, patients often have considerable picky eating experience and considerable anxiety about trying new and different foods. Picky eating may also develop situationally as an adult. For example, the fitting of dentures may leave adults overly cautious about foods previously eaten or new food experiences, for fear of difficulties with their dentures.(9)

The current literature is mainly focused on childhood rather than adulthood picky eating. While some links have been made between childhood picky eating and adult picky eating,(10) these are relatively scarce and as a consequence, specific treatment protocols or responses to adult picky eating are not widely established. For example, a recent PubMed search revealed 151 results for the search string “child* AND picky AND eating NOT adult*” but only 14 results for the search “adult* AND picky AND eating NOT child*”. There is no clear picture of prevalence in adults and in general, adult picky eating from ontological, diagnostic and treatment perspectives, is under-studied. Treatment options generally appear limited to cognitive behavioural therapy with a licensed Psychologist in the case of ARFID.(11) or simply encouraging choice from a variety of foodstuffs.

THE CONSEQUENCES OF PICKY EATING

Picky eating may sometimes be dismissed in children as being of no great consequence – a quirky feature of personality that is essentially harmless. But is this the case? Poor dietary intake is currently the primary identified risk factor for premature death in the USA.(6) Additionally, 45% of cardio-metabolic deaths are related to sub-optimal nutrition.(12) Consequently, there is a strong move already to treat diet as a “vital sign”(13) in health care.

Many of the patients I see have come to eat only highly processed food, that is bland in color, flavor and texture – for example, potato crisps and chips, white bread, chicken, sweet biscuits and ice cream. They can often trace such fussiness about food back to adolescence. There is some evidence to suggest that childhood picky eating is a prequel to adult picky eating.(10) In any event, such a dietary pattern is both “picky” and nutritionally inadequate.

Furthermore, it may be that picky eating generally is associated with greater risk of developing so-called “lifestyle” diseases or non-communicable chronic disease such as diabetes, hypertension, hypercholesterolemia among others.(14)(2)

ASSESSING PICKY EATING IN PATIENTS

Formal methods for assessing picky eating appear to be relatively recently developed(15). It is therefore likely that adult picky eating behaviors are not currently being widely recognized and assessed in clinical settings. The fundamental sign of picky eating is resistance to eating a variety of foods and a consumption of a narrow, nutritionally restricted diet. This may be a primary driver of cardiometabolic disease risk, inadequate nutrition and poor body weight control. Consequently, an assessment and understanding of the extent to which picky eating is present in a patient is a vital precursor to the treatment of these health problems.

Picky eating can be assessed initially either by the use of a questionnaire(15)(16) combined with interview, or simply by interview alone. Making straightforward open inquiry about dietary patterns is the most effective means of accomplishing this. Inquiries could include:

- *What does a typical dinner/breakfast/lunch look like for you?*
- *What do you eat between main meals?*
- *What new foods have you tried this year?*
- *What vegetables do you routinely eat?*

Having established that a pattern of picky eating behavior exists, asking additional questions to understand the patient perspective of this is useful. Such questions could include:

- *How long do you recall this pattern being present in your life?*

- *What is your understanding of how this pattern of eating developed?*
- *What have been the benefits/consequences of this pattern of eating for you?*
- *What would it mean for you to broaden the range of foods you eat?*
- *On a scale from 0-10, where 10 is the most, how much would you like to see a change in this for yourself?*

Note the neutrality of the questions above – judgment is neither overt nor implied. At this point the practitioner is not aiming to provide “expert” knowledge of the consequences of this pattern of eating. The goal here is to understand more fully the patient experience in order to learn more about the picky eating behavior. Aspects may include whether it is longstanding, has elements of comorbid anxiety, what specific prequelae it may have, how the patient sees it as useful to him/her currently and what consequences may have been experienced as a result of it. Notwithstanding this neutrality, it is also appropriate to engage in a curious examination of the role that picky eating may be currently playing in the person’s health status. An example inquiry may be:

- *What has been the impact of this eating pattern on your overall health, in your view?*

This approach to understanding the prequelae, context, impact, behavioral and social consequences of picky eating provides a strong foundation for the health professional seeking to partner with a patient to support health behavior change. Drawing on this detailed individual information, the health coach can work with the patient as s/he develops a personal vision for health and wellbeing. Further, the health coach can support the patient to identify strategies and goals to fulfil this vision that are personally meaningful and relevant.

THE POTENTIAL FOR HEALTH COACHING TO SUPPORT EATING BEHAVIOUR CHANGE

Evidence based health coaching is the practice of partnering “with clients seeking self-directed, lasting changes, aligned with their values, which promote health and wellness and, thereby, enhance well-being.”(17)

The role of health and wellness coaching in chronic disease management and early intervention is increasingly the focus of study(18) and the results point consistently to some key factors to explain its efficacy. One of those key factors is the promotion of autonomy and self-direction in health care – engaging patients in a way that seeks to educate and inform where required - and focusses mainly on the development of enduring supported behavioural change that aligns with the values and lifestyle of the patient.

The use of health coaching strategies in improving diet has already been the focus of some investigation;(18)(19)(20) however, there does not appear to be any published work on the use of health coaching strategies for assisting adult patients to modify picky eating behaviours. Additionally, there is scant published research about effective interventions for the consequences of adult picky eating (which themselves are poorly understood beyond nutritional inadequacy and weight management difficulties). Notwithstanding this, health

coaching provides a framework for addressing the picky eating behaviour itself. The relatively recently established field of culinary medicine(21) and education has begun to provide some insight and direction.

A PROPOSED HEALTH COACHING APPROACH TO SUPPORT BEHAVIOUR CHANGE IN PICKY EATERS

Once assessment has occurred and some pattern of picky eating has been established, the practitioner should discuss with the patient referral to a health coach (if unable to provide the health coaching intervention personally). Health coaching uses a supportive relational framework to encourage the development of autonomous choice, strength, confidence, readiness and motivation to change.(22)(23) The coaching skills employed in such a framework include the principles of positive psychology and positivity,(24) practices of gratitude, recognition of small steps and small change, appreciative inquiry, (25) mindfulness, “SMART” goal setting(26) and the use of “desire to change” and “confidence to change” scales.(27) When required to manage ambivalence – motivational interviewing and decisional balance interventions may be used.(28) Further research is needed to determine the optimal number of health coaching sessions.(19) There does appear to be a dose-response relationship between number of sessions and health outcomes using a schedule of four to 18 sessions dependent on patient need.(19)

The coaching intervention may be provided either by a suitably trained primary care physician or trained allied health personnel. In the case of picky eating, it is recommended that coaching focus on two aspects of diet and nutrition: the range of foods the patient may be prepared to try and the use of culinary medicine – the skills of preparing and cooking food. Culinary medicine is described elsewhere(29)(30) and is not specifically detailed here. This systems focused approach on person and environment ensures that the patient as well as the systems in which the patient operates are coached.(31)

The initial creation of an overarching health and wellness vision(16) is central to the coaching process and gives the patient a clear picture of what to move towards (rather than what to move away from). Questions which can assist in the development of vision include:

- *What does your life look like in 5 years with respect to your health and wellness?*
- *What does your health allow you to do then?*
- *What are the values that drive your choices in life?*
- *What will your strengths and successes be in 5 years?*
- *What will you be able to say about yourself?*

Open inquiry and reflection are also used to clarify needs and values. These needs and values, as identified by the patient, become the personalized motivators which they will then draw upon to work towards the desired health behavior change. Medium term outcome or action goals (approximately three months ahead) are identified to form a bridge between the longer-term vision and the formation of shorter-term health behavior change goals. Beyond this, a recursive process of short-term goal identification, planning and progress tracking is employed. It is vital that the goals (in this case eating behavior goals and therefore food preparation/cooking goals) are set by the client, not the coach. It is also

imperative that the coach does not find him or herself in the position of suggesting or bargaining with the patient (*What if you were to eat leafy greens twice a week?*). This leads to a reduction in autonomy, confidence and motivation and impairs the coaching approach. Instead, the identification of specific goals for behavioral change should be patient-initiated and driven.

An overview of how the various stages of the health coaching process might be applied in this context is illustrated in Table 1.

COACHING AREA OF FOCUS	EXAMPLE OF PRACTICE
Identification of long-term health vision	<i>*What does your life look like in 5 years with respect to your health and wellness?</i> <i>*What does your health allow you to do five years from now?</i>
Linking of Vision to Needs and Values (Motivators)	<i>*What are the values that drive your choices in life?</i> <i>*What needs in you are unmet by your current health status?</i> <i>*In what ways will improving your health allow you to live more closely with your values?</i> <i>*What's been your best experience of meeting your needs for good health?</i>
Development of medium-term goals	<i>*Three months from now, what will you be doing differently?</i> <i>*when you've been working towards your vision for three months, what will look different?</i>
Development of short term (SMART) goals	<i>*What is a particular area you'd like to work on over the next one to two weeks?</i>

Table 1- Stages and examples of the process

CONCLUSION

While currently not well understood or studied, adult picky eating appears to correlate with inadequate nutrition, overweight/obesity and other chronic non-communicable diseases. It therefore presents as a lifestyle behavior and a health risk which warrants intervention to support change. Health coaching provided by a trained health and wellness coach is a useful support strategy to assist patients to make behavioral changes to problematic picky eating.

REFERENCES

1. Kauer J, Pelchat ML, Rozin P, Zickgraf HF. Adult picky eating. Phenomenology, taste sensitivity, and psychological correlates. *Appetite*. 2015 Jul;90:219–28.

2. Thompson C, Cummins S, Brown T, Kyle R. What does it mean to be a 'picky eater'? A qualitative study of food related identities and practices. *Appetite*. 2015 Jan 1;84:235–9.
3. Khaothiar L, McCowen KC, Blackburn GL. Obesity and its comorbid conditions. *Clin Cornerstone*. 1999;2(3):17–31.
4. Taylor CM, Wernimont SM, Northstone K, Emmett PM. Picky/fussy eating in children: Review of definitions, assessment, prevalence and dietary intakes. *Appetite*. 2015 Dec;95:349–59.
5. Fact sheets - Malnutrition [Internet]. [cited 2020 May 23]. Available from: <https://www.who.int/news-room/fact-sheets/detail/malnutrition>
6. Mokdad AH, Ballestros K, Echko M, Glenn S, Olsen HE, Mullany E, et al. The State of US Health, 1990-2016: Burden of Diseases, Injuries, and Risk Factors Among US States. *JAMA*. 2018 Apr 10;319(14):1444–72.
7. Sherman RP, Petersen R, Guarino AJ, Crocker JB. Primary Care-Based Health Coaching Intervention for Weight Loss in Overweight/Obese Adults: A 2-Year Experience. *Am J Lifestyle Med*. 2019 Aug;13(4):405–13.
8. Association, American Psychiatric. *Diagnostic and Statistical Manual of Mental Disorders*. 5th ed. Washington DC; 2013.
9. van den Heuvel E, Newbury A, Appleton KM. The Psychology of Nutrition with Advancing Age: Focus on Food Neophobia. *Nutrients* [Internet]. 2019 Jan 12 [cited 2020 Jan 29];11(1). Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6356997/>
10. Ellis JM, Zickgraf HF, Galloway AT, Essayli JH, Whited MC. A functional description of adult picky eating using latent profile analysis. *Int J Behav Nutr Phys Act*. 2018 Nov 6;15(1):109.
11. Ong C, Phuah KY, Salazar E, How CH. Managing the 'picky eater' dilemma. *Singapore Med J*. 2014 Apr;55(4):184–90.
12. Micha R, Peñalvo JL, Cudhea F, Imamura F, Rehm CD, Mozaffarian D. Association Between Dietary Factors and Mortality From Heart Disease, Stroke, and Type 2 Diabetes in the United States. *JAMA*. 2017 07;317(9):912–24.
13. Katz DL. Diet Is the Single Most Important Predictor of Health. *Altern Complement Ther*. 2019 Sep 27;25(6):280–4.
14. Lipman T, Schucker M, Ratcliffe S, Holmberg T, Baier S, Deatrick J. Diabetes Risk Factors in Children: A Partnership Between Nurse Practitioner and High School Students. *Mcn Am J Matern Nurs*. 2011 Feb;36(1):56–62.

15. Hunot C, Fildes A, Croker H, Llewellyn CH, Wardle J, Beeken RJ. Appetitive traits and relationships with BMI in adults: Development of the Adult Eating Behaviour Questionnaire. *Appetite*. 2016 01;105:356–63.
16. Set your purpose, reach your goals [Internet]. Mayo Clinic. [cited 2020 Jan 29]. Available from: <https://www.mayoclinic.org/healthy-lifestyle/adult-health/in-depth/set-your-purpose-reach-your-goals/art-20269956>
17. NBHWC – National Board for Health & Wellness Coaching [Internet]. [cited 2020 Jan 29]. Available from: <https://nbhwc.org/>
18. Sforzo GA, Kaye MP, Todorova I, Harenberg S, Costello K, Cobus-Kuo L, et al. Compendium of the Health and Wellness Coaching Literature. *Am J Lifestyle Med*. 2018 Nov 1;12(6):436–47.
19. Gordon NF, Salmon RD, Wright BS, Faircloth GC, Reid KS, Gordon TL. Clinical Effectiveness of Lifestyle Health Coaching. *Am J Lifestyle Med*. 2016 Jul 7;11(2):153–66.
20. Wong-Rieger D, Rieger FP. Health coaching in diabetes: empowering patients to self-manage. *Can J Diabetes*. 2013 Feb;37(1):41–4.
21. Polak R, Phillips EM, Nordgren J, La Puma J, La Barba J, Cucuzzella M, et al. Health-related Culinary Education: A Summary of Representative Emerging Programs for Health Professionals and Patients. *Glob Adv Health Med*. 2016 Jan;5(1):61–8.
22. Wolever RQ, Simmons LA, Sforzo GA, Dill D, Kaye M, Bechard EM, et al. A Systematic Review of the Literature on Health and Wellness Coaching: Defining a Key Behavioral intervention in Healthcare. *Glob Adv Health Med*. 2013 Jul;2(4):38–57.
23. Karmali S, Ng V, Battram D, Burke S, Morrow D, Pearson ES, et al. Coaching and/or education intervention for parents with overweight/obesity and their children: study protocol of a single-centre randomized controlled trial. *BMC Public Health* [Internet]. 2019 Mar 28 [cited 2020 Feb 22];19. Available from: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6437993/>
24. Bolier L, Haverman M, Westerhof GJ, Riper H, Smit F, Bohlmeijer E. Positive psychology interventions: a meta-analysis of randomized controlled studies. *BMC Public Health*. 2013 Feb 8;13:119.
25. Salyers MP, Firmin R, Gearhart T, Avery E, Frankel RM. What we are like when we are at our best: Appreciative stories of staff in a community mental health center. *Am J Psychiatr Rehabil*. 2015;18(3):280–301.
26. Mai C, Clark B. SMART: A Program to Enhance Self-Directed Learning. *J Grad Med Educ*. 2016 Jul;8(3):451–2.
27. Treatment C for SA. Chapter 8—Measuring Components of Client Motivation [Internet]. Substance Abuse and Mental Health Services Administration (US); 1999 [cited 2020 Jan 29]. Available from: <https://www.ncbi.nlm.nih.gov/books/NBK64975/>

28. Krigel SW, Grobe JE, Goggin K, Harris KJ, Moreno JL, Catley D. Motivational interviewing and the decisional balance procedure for cessation induction in smokers not intending to quit. *Addict Behav.* 2017;64:171–8.
29. Polak R, Dill D, Abrahamson MJ, Pojednic RM, Phillips EM. Innovation in Diabetes Care: Improving Consumption of Healthy Food Through a “Chef Coaching” Program: A Case Report. *Glob Adv Health Med.* 2014 Nov;3(6):42–8.
30. Parks KA, Polak R. Culinary Medicine: Paving the Way to Health Through Our Forks. *Am J Lifestyle Med.* 2019;
31. Jordan M, Livingstone JB. Coaching vs Psychotherapy in health and Wellness: Overlap, Dissimilarities, and the Potential for Collaboration. *Glob Adv Health Med.* 2013 Jul;2(4):20–7.

A RECIPE

Here’s a recipe I developed while coaching one of my post-surgical bariatric patients. She wanted to try some non-meat sources of protein and wanted to learn how to prepare and cook more nutritious food. She had been a very picky eater prior to this (mostly white bread, mashed potato and chicken); however, she had come to the point of wanting to be adventurous in trying new foods, recognizing that her prior eating patterns were problematic for her.

This recipe consists of some things that she already enjoyed eating – tomatoes and mushrooms (even though she rarely ate them), and added in eggplant, lentils and a nutritious leafy brassica – kale. There is a small amount of straightforward cooking (oven roasting and boiling/simmering).

Summer Kale Salad



Ingredients

1 bunch kale
2 whole leeks, white part only
6 whole tomatoes
1 eggplant
200 g button mushrooms
1 cup uncooked French lentils
2 tablespoons pepitas
2 tsp extra virgin olive oil
Juice of 1 lemon
Balsamic Vinegar
1 tsp vegetable stock powder
Extra Virgin Olive oil spray

For the dressing

1 tablespoon extra-virgin olive oil
3 tablespoons apple cider vinegar
4 cloves crushed garlic
1 tablespoon maple syrup
1 tablespoon Dijon mustard
Salt, pepper, paprika, and dried oregano to taste

RECIPE

The great thing about this recipe is that the various parts can be made ahead of time and kept in the refrigerator – up to 48 hours if you want. A note about the lentils – I use French lentils because they hold their form after cooking much better than red or green lentils.

1. Rinse the kale well under cold running water – don't worry about being rough with it. Give it a really good scrub to get rid of dust and dirt. Dry it on paper towel, then tear it off the stems into small pieces – think of pieces that would fit on a tablespoon. Put these in a bowl and drizzle over the 2 tsp olive oil and the lemon juice. Massage this into the leaves for a minute or so – this helps to soften the kale and gives it a lovely tang. The oil simply helps the lemon juice to adhere to the leaves otherwise it would run right off. Set aside till you need it.
2. Slice the tomatoes in two horizontally. Place in a bowl and lightly spray with olive oil spray (you get a good coating for much less oil this way). Sprinkle with salt, pepper and paprika to taste then toss well so that the halves are well coated. Arrange on a rack in a roasting dish and slow roast at 150°C for 2 hours or more – you want to get them partially dehydrated but still soft and moist. When done, remove, set aside and allow to cool.
3. Dice the eggplant and mushroom and toss in a bowl with paprika, salt and pepper and a little olive oil spray if you like. Tip into a roasting dish. Slice the leeks lengthwise and place in the same lightly oiled roasting dish. Sprinkle liberally with balsamic vinegar and roast in a 220°C oven for 25-30 minutes, turning the eggplant and mushroom once halfway. Cover with foil at this time. Once cooked, slice the leeks crosswise into 1cm lengths and set aside.
4. Prepare the lentils by adding to 3 cups cold water, adding 1 tsp vegetable stock powder to the water. Bring to the boil for 25 minutes. Remove, drain and set aside.
5. Make the dressing by combining all ingredients in a tightly sealed jar and shaking vigorously
6. Combine the kale, tomatoes, mushrooms, eggplant, leeks, pepitas and lentils in a bowl and toss lightly and well (make sure the lentils don't all end up on the bottom)
7. Dress, toss lightly again and serve!