

THE REAL Food Guide for CBT-T Clinicians: Basic Food and Eating Training for Eating Disorders

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The REAL Food Guide (*Recovery from **E**Ating disorders for **L**ife*) is a framework that uses core principles of nutrition, with consideration of the beliefs and misinformation that are frequently endorsed by individuals with eating disorders. It is a pictorial tool based on the best evidence to date bringing practical information together in one place¹. It is designed for all clinicians who work with clients with eating disorders, who require basic knowledge on food and eating, in order to identify distortions and therefore effectively provide intervention². It is not intended to teach clinicians who are not dietitians to provide detailed nutrition intervention, write meal plans, undertake nutritional assessment or be an alternative to seeing a dietitian. Rather, it is a framework that summarizes key messages on food and eating, tailored to the needs, and concerns of eating disorder clients. Using a standardized framework for talking about food and eating allows all clinicians working in a team to be consistent, as well as delivering a clearer and more tailored message than current public health nutrition messages¹.

Additionally, the guidance provided on food and eating for clients by the REAL Food Guide is nutritionally adequate¹. This means that the meal plans for weight maintenance and weight regain, if followed, will provide enough protein, carbohydrate and fat, essential vitamins and minerals to meet *most* individuals' needs. There are exceptions to this, as individuals may have preferences, dislikes or nutritional needs meaning they require more or less food on their day-to-day meal plan, particularly if they exercise, are tall, or just because it is the way their body is designed.

When should I refer my client to a dietitian?

Evidence based practice recommends the inclusion of nutrition and dietetic assessment, education and intervention as part of the multidisciplinary management of clients with eating disorders^{3,4}. Dietitians help patients define dietary problems and plan solutions to these dietary challenges⁵. However, in real life there may be barriers to accessing dietetic treatment such as availability and affordability of care; waiting times for services; a perception that patients may not benefit from dietetic input or implement nutrition changes; or patient's willingness to attend dietetic services^{6,7}. It is ideal that any clinician working with clients with eating disorders has access to a dietitian to be able to discuss cases and client's nutritional issues as well as to refer patients to when necessary⁸.

Indications for referral to a dietitian may include clients with the following presentations:

- Pregnancy or breastfeeding.
- A co-morbid medical diagnosis that impacts on food intake e.g. type 1 diabetes mellitus; gastrointestinal conditions such as Crohn's disease; food allergies or intolerances (including Coeliac disease); cystic fibrosis; and kidney disease to name a few.
- Taking medication that impacts on nutritional needs, appetite or weight e.g. anti-psychotic medications.
- Losing weight or unable to gain weight if they are underweight. "Underweight" does not refer only to clients with a BMI below 20 but may also include clients who have lost a large amount of weight rapidly and exhibit symptoms of malnutrition and medical instability despite their BMI being above 20.
- Ongoing intake of a limited range of foods throughout treatment.

- Avoidance of other necessary skills and behaviours associated with eating such as grocery shopping, preparing and cooking food.

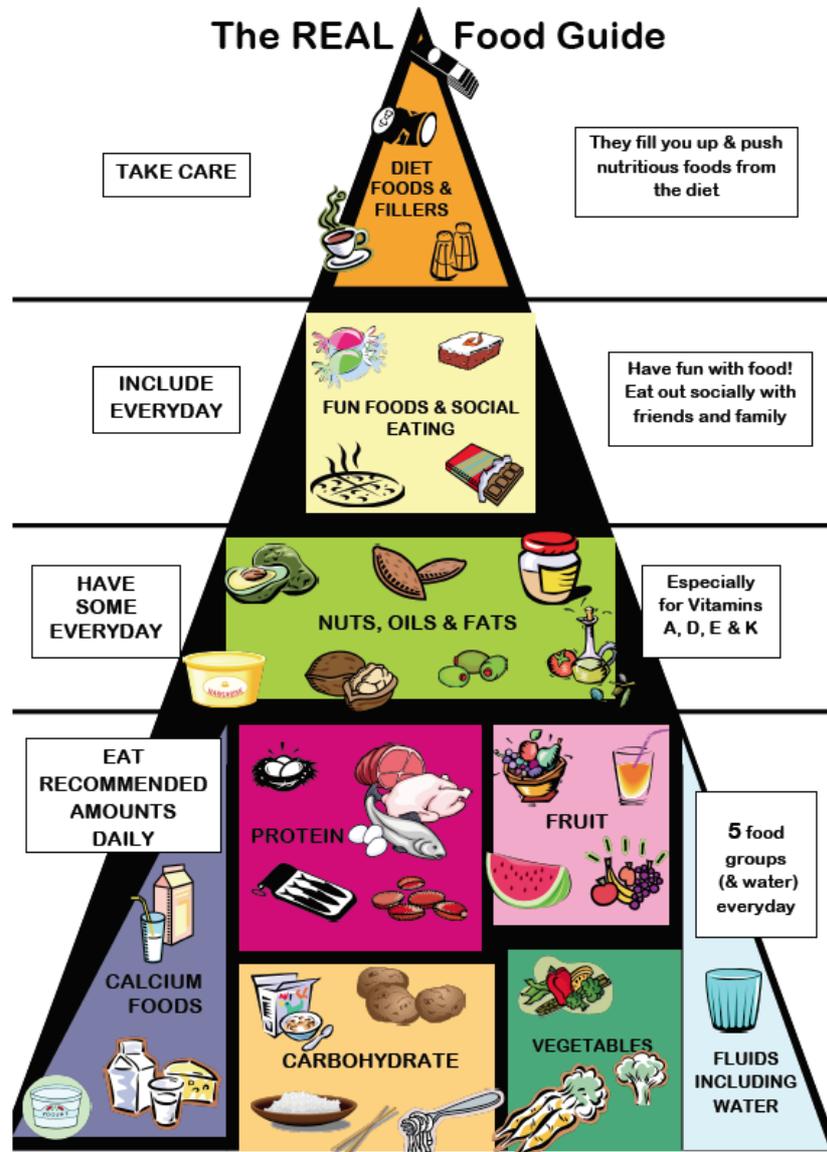


Figure 1: REAL Food Guide.

USING THE REAL FOOD GUIDE

The REAL Food Guide recommends ***eating mechanically*** (in addition to regular eating as is considered best practice^{8,9}) when a client commences treatment for an eating disorder. Although clients often experience difficulty in eating regularly and mechanically, establishing structure with eating is a key component of achieving nutritionally adequate eating patterns and forms the scaffold for recovery from an eating disorder. Eating mechanically refers to:

- Planning eating episodes;
- Relying on external cues to regulate eating such as a meal plan or setting an alarm and;
- Acknowledging internal cues of eating such as hunger and fullness signals but not acting on them.

The bottom layer of the REAL Food Guide Pyramid depicts five core food groups (fruit, vegetables,

carbohydrate, protein, calcium foods), and fluid¹. There are three additional layers providing recommendations on the inclusion of fats and oils, fun foods and social eating, and diet foods and fillers. The recommended number of serves per day is an estimate of the minimum number of serves required each day for an adult older than 18 years to achieve nutrient requirements. It is a starting point, and some individuals on weight maintenance or regain may require more serves than is recommended below. The authors define weight regain meal plan as being suitable for those individuals with a Body Mass Index less than 20 kg/m².

Calcium Foods

This food group refers to foods that are rich sources of calcium such as dairy products and calcium enriched soy products. There is no recommendation to choose fat modified products such as low fat milk or diet yoghurt, typical of many other nutrition guides.

Most of the body's calcium is stored in the bones and teeth with a small amount needed for blood clotting, muscle functioning, nerve conduction and fluid balance. Having adequate dietary calcium to build strong healthy bones before middle age is the best way to prevent osteoporosis. Because of restrictive eating behaviors, eating disorder clients severely compromise their chance of achieving peak bone mass, and as a result, often experience early onset of osteoporosis (or brittle bones)¹⁰. Therefore, obtaining an adequate amount of dietary calcium is a key message and nutritional target for eating disorder clients. Avoiding or removing calcium rich foods from the diet also means compromising adequate intake of many nutrients essential for good health such as protein, vitamins (A, E, B12, and riboflavin), and other minerals (phosphorus, magnesium, potassium and zinc).

For clients who choose not to have dairy products, calcium-*fortified* soy-milk is the best option. *Fortification* means vitamins and minerals are added to the product to improve its nutrient content. It is essential for clients to take care with alternatives sources of calcium (i.e. rice, almond, coconut and oat milk) as many have limited nutritional value. None of these non-dairy alternatives have any naturally occurring calcium, are low in energy and protein, and require fortification to be nutritionally equivalent to dairy or calcium fortified soy products.

<p>Recommended Serves of Calcium foods per day</p> <p>Weight maintenance = 3 serves</p> <p>Weight regain = 4 serves</p>
<p>One serving size of calcium food</p> <p>1 cup flavoured milk</p> <p>1 ¼ cups plain, unflavoured milk</p> <p>1 ½ plain, unflavoured soy milk</p> <p>2 slices of cheese (each slice is size of your palm)</p> <p>½ cup grated cheese</p> <p>½ cup custard</p> <p>1 cup flavoured yoghurt</p> <p>1 cup plain, unflavoured yoghurt</p>

It is important to note that "Calcium foods" refer to standard, whole varieties and NOT modified versions such as "light" or "skim" milk. It is important to clarify with your client precisely what type of calcium food they are having. To demonstrate why this is important, it is necessary to have almost 2 cups of "light" milk or 2 ¼ cups of "skim" milk to provide the same nutritional value as one serve of standard milk.

Protein Foods

Protein is an essential *macronutrient* from food required to transport vitamins and minerals around the body, to provide the building blocks (amino acids) for growth and repair of body tissue, and to provide energy. Protein rich foods also provide iron, zinc, vitamin B12 and omega-3 essential fatty acids.

Many eating disorder clients choose a vegetarian diet because they believe it is a “healthier” way of eating¹¹. It is possible to have a balanced vegetarian or meat containing diet, however a nutritious vegetarian diet is not one where meat has been excluded and nothing else has been added in its place. It is important that alternative sources of nutrients found in meat, in particular iron and zinc are replaced. A well-planned vegetarian diet can meet the nutritional requirements of patients needing to maintain or gain weight. However, one of the main differences of a vegetarian diet is that the iron found in vegetarian protein sources (such as legumes) is not well absorbed by the body. Adding a vitamin C source to meals containing non-meat sources of iron can increase absorption¹² and is an important food message for eating disorder clients. Some examples of this in practice are adding fruit or a glass of juice to breakfast cereal or a serve of leafy greens with lentils to a main meal. Additionally, *polyphenols* from tea and coffee reduce the absorption of iron¹², so it is best if clients following a vegetarian diet avoid drinking tea and coffee with lunch and dinner when they will be consuming vegetarian protein sources that contain iron.

The REAL Food Guide recommends a variety of animal and vegetarian protein foods each day, one serve at lunch and one at dinner. A simple method for achieving balanced meals at lunch and at dinner is to use the Thirds Rule (See Figure 2). This means that on an average size dinner plate, one third of the plate should be filled by carbohydrate foods, one third filled by protein foods, and one third filled by vegetables. For most people with eating disorders, this usually means increasing the quantity of protein and carbohydrate but reducing the amount of vegetables that are on the plate. At first glance it may appear as though a client is eating a large amount of food, but often the meal will not contain adequate amounts of carbohydrate and protein.

Recommended Serves of Protein foods per day		
Weight maintenance = 2 serves		
Weight regain = 2 serves		
One serve of protein food		
Animal protein sources	Vegetarian protein sources	Vegan protein sources
Palm size portion of chicken ¾ cup beef mince Palm size portion of steak ½ cup canned salmon, drained ¾ cup canned tuna, drained Piece of white fish the size of whole hand	2 slices of cheese (each slice size of your palm) ½ cup grated cheese ½ cup ricotta cheese 3 eggs	1 cup chopped tofu ¾ cup baked beans 1 cup legumes (e.g. chickpeas, kidney beans) 1 full handful of almonds 2 tablespoons tahini 1/3 cup hummus 2 tablespoons peanut butter

Analysis of vegan meal plans for both weight maintenance and weight regain demonstrate that it is feasible to achieve nutritional adequacy with a vegan diet¹. When working with eating disorder clients in an outpatient setting, negotiating meeting nutritional requirements with a vegan-style meal plan may be appropriate when considered on a case-by-case basis, but it is not recommended as a

standard treatment. While there may be genuine ethical reasons for choosing a vegan diet, continued endorsement of such a diet involves restricted food choices, dichotomous thinking about food, hyper-vigilance about ingredient lists on food labels and limitations on social eating such as avoiding restaurants or food prepared by others because of uncertainty about the ingredients used. Currently there is a lack of research as to whether adhering to such a strict diet is helpful or harmful, and it is unclear how this would impact on recovery from both a nutritional, and psychological point of view. Until the relationship between endorsement of a vegan eating pattern and recovery from an eating disorder is better understood, a vegan meal pattern for routine use in the treatment of eating disorders is not recommended¹. As a treatment principle, clients who choose a limited number of foods should be encouraged to broaden their choices, and this applies for those who have limited their protein intake by following a vegan diet.

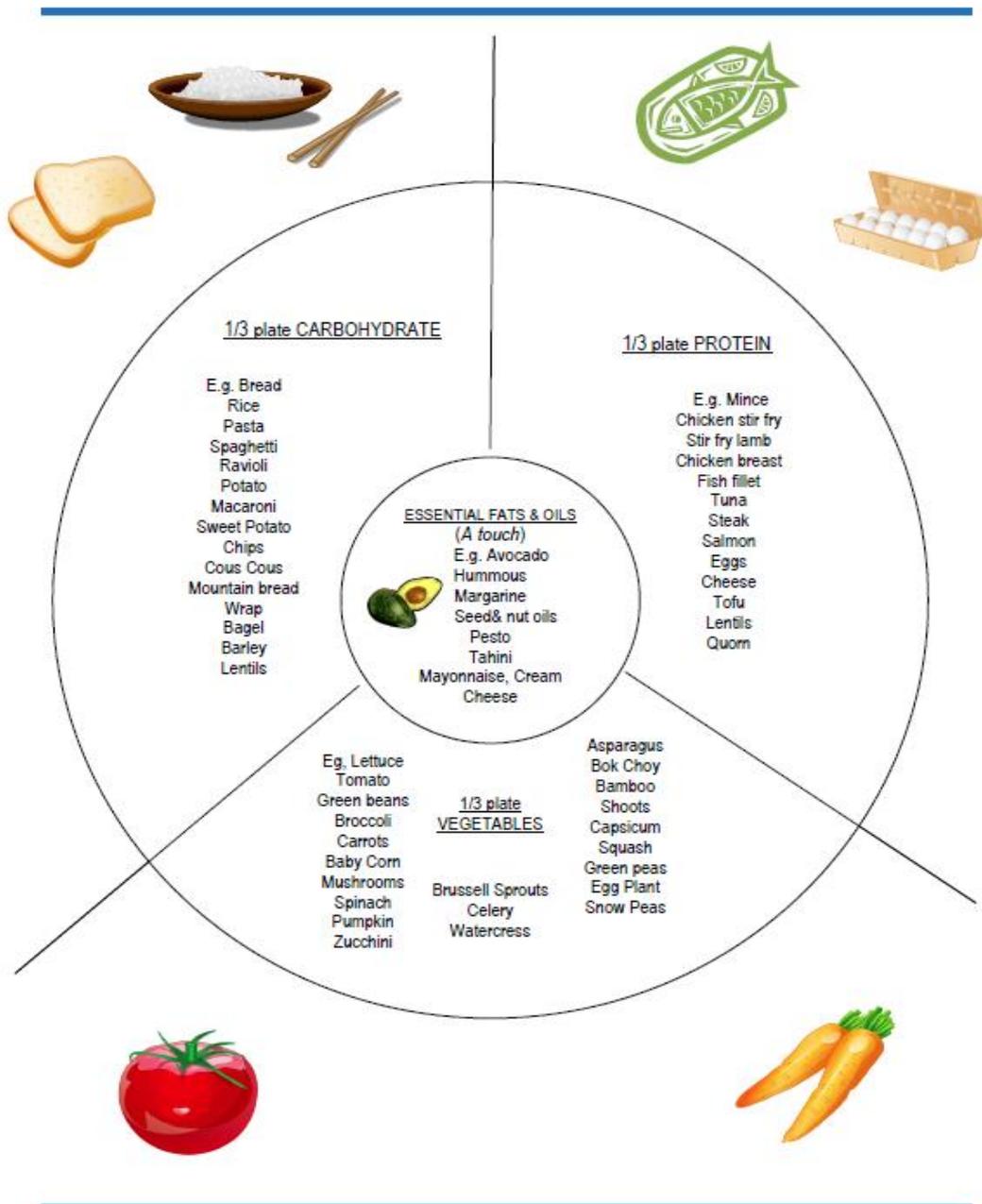


Figure 2: Thirds rule for lunch and dinner meals.

Carbohydrate Foods

This core food group refers to foods that contain the macronutrient carbohydrate such as grains, cereal, rice and some starchy vegetables such as potatoes. It is recommended that a variety of

whole grains and carbohydrate foods are included at each meal to achieve an adequate intake of energy, fibre, thiamine, folate and iodine. “Variety” means choosing more than one food from this group over an average day. For example, a carbohydrate choice at lunch might be two slices of bread and at dinner it could be 1 cup of cooked pasta. Additionally, variety over the week may mean one night is rice as the carbohydrate of choice at dinner, one night it is potato and one night is spaghetti. A meal plan that has poor or low variety would be having rice every night of the week. When introducing a meal plan the initial goal may be to include any source of carbohydrate at dinner. As treatment progresses, the goal may be to have a variety of choices as eating patterns improve. The REAL Food Guide recommends that carbohydrate is included at breakfast (e.g. cereal and/or toast), lunch (e.g. sandwich or wrap), and at dinner (e.g. rice, pasta, potato). It is also included as a snack option at least once per day. The amount of carbohydrate that is required is proportional to the amount of physical activity undertaken and if weight gain is required. Clients that are physically active will require a greater intake of carbohydrate to meet their energy and nutritional requirements than clients who are relatively inactive.

During digestion, carbohydrate foods are digested and broken down into glucose and absorbed into the bloodstream. Carbohydrate is needed for the body to function effectively, to provide fuel for the muscles and brain, and to stabilize blood glucose levels in the blood. The brain struggles to use any fuel other than glucose to meet its energy demands. Inadequate carbohydrate intake can lead to tiredness, fatigue, dizziness, irritability, and low blood glucose levels. The effects of low blood glucose include blurred vision, difficulty concentrating, hunger, sweating, weakness, light-headedness and confusion.

As a result of malnutrition, eating disorder clients often have no glycogen (the stored form of glucose) in their muscles and liver. When starting to eat more regularly and increasing the amount of carbohydrate in their diet, clients will store some glucose in the liver and muscles as glycogen, which is packaged up with water. This may result in increases in weight of a few kilograms at the beginning of treatment, which often occur in a short space of time and do not align with the client’s eating. This initial increase in weight is perceived as catastrophic for clients with eating disorders whose worst beliefs appear to be confirmed, that they will gain large amounts of weight by consuming even small amounts of food. An explanation of the role of carbohydrate and how it is stored by the body, is useful at this time.

Recommended Serves of Carbohydrate (meals) per day	
Weight maintenance = 3 serves	
Weight regain = 4 serves	
One serve of carbohydrate (meals)	
Breakfast	Lunch and Dinner
½ cup muesli/granola 1 cup cereal flakes 1 cup bran cereal 1 cup cooked oatmeal/porridge 2 slices bread 2 slices raisin/fruit toast 1 ½ cups puffed cereal (e.g. Rice Bubbles)	2 slices bread 1 bread roll 2 dinner sized bread rolls 1 cup cooked pasta 1 cup cooked rice 1 cup cooked quinoa 1 ½ cups cooked thick noodles 1 cup sweet corn 1 potato (size of a fist)

Recommended Serves of Carbohydrate (snack) per day
Weight maintenance = 1 serves
Weight regain = 2 serves
One serve of carbohydrate (snack)
1 muesli bar 4 cups popcorn 1 crumpet + 1 teaspoon spread 1 slice bread + 1 teaspoon spread 1 slice raisin/fruit toast + 1 teaspoon spread 16 rice crackers 6 plain crackers (no spread) 3 large or 4 small crackers + 1 teaspoon spread

Fruit

The REAL Food Guide recommends a variety of different fruits of different colour are chosen each day to provide potassium, dietary fibre, vitamin C and other beneficial antioxidants. It is ideal to include fruit in different forms such as tinned, juiced and dried fruits, which are just as nutritious as fresh fruit. On a weight maintenance meal plan, two pieces of fruit are recommended. For weight regain four serves are recommended, with two of these serves coming from fruit juice, added to lunch and dinner instead of having a glass of water. As a rule of thumb having more serves of fruit than this is not recommended as it can be filling, and pushes other foods from the diet, affecting the overall nutrient balance of the diet.

Recommended Serves of Fruit per day
Weight maintenance = 2 serves
Weight regain = 4 serves
One serve of fruit
1 orange 1 apple 1 pear 1 small or ½ large banana ¾ cup grapes 1 cup cherries 2 kiwi fruit 2 mandarins 3 plums 1 cup blueberries 2 cups strawberries* 2 tablespoons raisins or sultanas 6 dried apricot halves 1 cup tinned fruit, drained 1 cup fruit juice <i>*Include strawberries only occasionally as the large portion can contribute to feeling full</i>

Vegetables

It is recommended that clients choose a variety of vegetables of different colours to provide vitamin C, folate, potassium, beta-carotene and dietary fibre. It is important clients do not to eat vegetables in excessive quantities as they are filling and push other nutritious food groups such as carbohydrate,

fats and protein foods from the diet.

Recommended Serves of Vegetables per day
Weight maintenance = 4 serves
Weight regain = 4 serves
One serve of vegetables
½ cup raw mushrooms
1 cup mixed salad
½ cup cooked peas
1 cup cherry tomatoes
1 fist sized tomato
1 piece of cucumber the length of an index finger
½ capsicum
1 piece of carrot the length of an index finger

Fluid

Water is included as a core food group to emphasise that adequate hydration is an important component of daily nutritional requirements¹. Research has shown that eating disorder clients' fluid or drink choices are often related to eating disorder beliefs (for example, fluid is used as a weight control method by suppressing appetite or to aid vomiting¹³). Disordered fluid intake is observed in the majority of eating disorder clients with most (54%) drinking excessively, and some (28%) drinking restrictively¹⁴. Some clients will restrict fluid intake to the extent that they put themselves at risk of dehydration. Other clients drink large quantities of fluid helps to stop feelings of hunger, and to distract from the thought of food and eating. Individuals who are underweight tend to drink large amounts of caffeinated beverages such as coffee, tea and/or diet soft drinks¹⁴. As a general rule, kidneys will excrete any fluid in excess of requirements, however it is possible to become water overloaded. Although this is rare it has been reported in eating disorder clients¹⁵ and individuals who drink too much in a short space of time.

It is important for fluids and drinks to be incorporated into meal plans in a structured way similarly to the way that food is planned. The REAL Food Guide recommends that clients:

- Include at least one cup of fluid and no more than two cups at every meal and snack each day (*fluid includes milk, flavoured milky drinks, juice, tea and coffee*);
- Do not drink continuously from large bottles, which may encourage excessive intake;
- Do not drink fluid rapidly before the start of the meal;
- Do not drink to suppress appetite *i.e. if hungry, do not choose diet soft drink, tea or coffee instead of eating*;
- Drink fluids during or at the end of a meal if they are struggling with feeling full during meals and snacks;
- Do not drink excessively when vomiting and engaging in the behaviour of "flushing" and;
- Are conscious of the importance of drinking adequate fluid to replace fluid losses from excessive exercise or from purging behaviours.

Recommended amount of fluid
Weight maintenance or regain = 1 to 2 cups of fluid at each meal and snack (1 cup = 250 mL)
The following drinks count towards fluid intake
Water Juice Tea and coffee Soft drink Milk based drinks Mineral water Iced tea

Nuts, Oils and Fats

The second layer of the REAL Food Guide describes “Nuts, Oils and Fats” to communicate that a healthy balanced diet includes adequate amounts of dietary fats and oils and foods that contain them each day¹. Foods containing essential fatty acids such as nuts, seeds, olives, unsaturated fats and oils (i.e. sunflower, olive and sesame oil) are essential for good health and it is recommended that one third of the total energy of the food eaten each day comes from dietary fat and oils¹⁶. Fat-soluble vitamins are also provided by this food group, including vitamin A (for eyesight and healthy skin), vitamin D (for strong bones and teeth and the absorption of calcium and phosphate); vitamin E (a component of cell membranes) and vitamin K (involved in blood clotting). Low dietary intake of these vitamins and deficiencies of essential fatty acids have been documented in clients with eating disorders^{17,18}.

As demonstrated by dietary modeling and nutritional analysis¹ there are three important steps, which should be recommended to eating disorder clients (regardless of whether they are required to gain weight or not) to achieve nutritional adequacy:

1. Include full fat or whole dairy and calcium rich foods, as clients will be unlikely to meet their energy requirements if they choose skimmed or low fat varieties;
2. Include a spread or a source of fat/oil at each main meal and;
3. Include a fun food once per day (see below for details on this food group).

Recommended Serves of Nuts, Oils and Fats per day
Weight maintenance = 2 serves Weight regain = 4 serves
One serve of Nuts, Oils and Fats
1 teaspoon olive oil 2 teaspoon butter or margarine 2 teaspoon peanut butter 3 teaspoon cream cheese 1 tablespoon avocado 1 tablespoon hummus 5 whole olives 2 tablespoon almonds or 6 almonds

Fun Foods and Social Eating

The third layer of the pyramid is for foods consumed when eating out or eating socially with others. These foods are included to assist with meeting energy requirements and to challenge clients' beliefs that these foods should be avoided or removed from the diet for good health¹. It is also clinically important from a dietary and psychological perspective to include higher energy foods.

Clients with eating disorders tend to isolate themselves socially because of their eating behaviour, and their anxiety related to eating in a social situation. For example, they often perceive that people are looking at them when they eat or making judgments about what they are eating. To avoid the anxiety associated with eating these foods, clients may avoid eating with their family; eat alone or in their bedroom; avoid social occasions such as birthdays; or avoid eating out in restaurants. This behaviour maintains dietary restriction and results in further social isolation.

Eating out and eating in social situations is recommended so that clients practice skills that enable them to spend time with family and friends and participate in social activities that involve food, eating in a manner similar to others at a social event, and expanding eating experiences. Some experts recommend targeting eating related anxiety by exposure to feared eating situations. These situations engage the client in challenging rather than avoiding their food fears, and provide an opportunity to experience habituation of anxiety and the disconfirmation of the feared consequence¹⁹.

The REAL Food Guide recommends eating out and having social eating occasions at least two times per week. Social eating can be a daunting and challenging experience for someone with an eating disorder and there are many eating situations that cause anxiety and stress such as banquets, shared meals with several dishes on the table, celebrations like Christmas, cocktail parties with finger foods, and ordering from a menu where the portion size and ingredients are not listed. These situations are difficult for clients with eating disorders as they are often concerned about:

- Others' impressions of their eating;
- Difficulty monitoring how much is eaten;
- Difficulty controlling portion size;
- Pressure to engage in social interaction;
- Ingredients used in the meal;
- Seeing food on display;
- Food hygiene issues and;
- Spending money on food.

Recommended Serves of Fun Foods per day
Weight maintenance = 1 serve Weight regain = 1 serve
One serve of Fun Food
3 rich chocolate biscuits 4 chocolate coated biscuits 3 cream biscuits 4 wafer biscuits 5 plain sweet biscuits 1 medium chocolate bar (50-60g) 1/3 cup lollies or sweets 1 single serve bag crisps (50g) 1 cupcake (bottom fits neatly into ½ cup) 1 muffin (bottom fits neatly into ½ cup)

1 palm sized piece of cake

Diet Foods and Fillers

The top layer of the REAL Food Guide depicts low energy foods, which are commonly used by eating disorder clients as a method of suppressing appetite and restricting energy for weight loss^{1,20}. Examples of the use of diet foods and fillers includes filling up on low energy foods, excessive use of artificial sweeteners, excessive quantities of fruit and vegetables, intake of low calorie drinks such as water and diet soft drinks, and excessive intake of tea and coffee^{14,21-23}. From a nutrition standpoint, these foods become problematic when they make up a significant proportion of a client’s daily intake as they replace or push out more nutritious foods from the diet. They may also keep clients focussed on dietary rules and restricting food, and the inclusion of diet foods and fillers is also counterproductive for weight restoration in clients who need to regain weight¹. The recommendation is not necessarily to eliminate these foods but to “be careful” in regards to how they might affect overall dietary intake.

Another group of foods that fit in this category are foods with a “health halo”. These are foods where a significant health benefit is attributed to the food making it more desirable as a food choice²⁴ e.g. choosing almond milk over dairy milk; or choosing “organic” foods.

Diet foods and fillers include
Diet drinks and soft drink (e.g. diet cola, artificially sweetened beverages)
Foods labelled as “diet”
Artificial sweeteners
Artificially sweetened beverages
Chewing gum
Sugar free sweets
Fat or energy modified foods
Excessive servings of fruits (especially lower calorie fruits such as strawberries)
Excessive servings of vegetables
Excessive use of sauces (e.g. sweet chilli sauce, tomato sauce)
Excessive use of salt and pepper

SAMPLE MEAL PLANS

A nutritionally adequate meal plan will usually be more food than clients with an eating disorder have allowed themselves to eat, and initially they may doubt that this is an appropriate amount of food. Other barriers reported by clients to following a meal plan include:

- It being too time consuming;
- Feeling that the whole day revolves around food with less time for non food activities;
- It costs too much money;
- It’s inconvenient to stop other activities to plan, purchase, and prepare food and;
- Initially, there is an increase in distress when following a meal plan and a perception that they feel worse not better by having a meal plan.

Table 1: Meal plan (including number of serves of each food group) for weight maintenance.

	Recommended serves	Sample food choices
BREAKFAST <i>Before 9 am</i>	1 carbohydrate serve 1 calcium serve 1 fruit serve 1 fluid	1 bowl cereal 1 cup milk / tub yoghurt Fresh fruit/fruit cup/juice Tea / coffee
AM SNACK	1 fruit serve 1 calcium serve 1 fluid	1 apple 1 tub yoghurt / 2 slices cheese Tea / coffee / water
LUNCH <i>Between 12 and 2 pm</i>	1 carbohydrate serve 1 protein serve 1 fat/oil serve 2 vegetable serves 1 fluid	2 slices bread 1 chicken breast 1 tablespoon avocado Grated carrot & lettuce 1 cup water
PM SNACK	1 fun food 1 fluid	1 piece carrot cake Tea / coffee / water
DINNER <i>Between 6 and 8 pm</i>	1 carbohydrate serve 1 protein serve 1 fat/oil serve 2 vegetable serves 1 fluid	1 cup cooked rice 3/4 cup beef mince 1 teaspoon sesame oil Onion, capsicum & beans 1 cup water
SUPPER	1 fruit serve 1 calcium serve 1 fluid	6 dried apricot halves / banana 1 cup hot chocolate Tea / coffee / water

Table 2: Meal plan (including number of serves of each food group) for weight regain.

	Recommended serves	Sample food choices
BREAKFAST <i>Before 9 am</i>	2 carbohydrate serves 1 fat/oil serve 1 calcium serve 1 fruit serve 1 fluid	1 bowl cereal 2 slices bread + spread 1 cup milk / tub yoghurt Fresh fruit / fruit cup / juice Tea / coffee
AM SNACK	1 carbohydrate snack 1 calcium serve 1 fluid	Muesli bar or 16 rice crackers 1 tub yoghurt / 2 slices cheese Tea / coffee / water
LUNCH <i>Between 12 and 2 pm</i>	1 carbohydrate serve 1 protein serve 1 fat/oil serve 1 vegetable serve 2 fruit serve	2 slices bread 1 chicken breast 1 tablespoon avocado Grated carrot & lettuce 1 orange 1 cup juice
PM SNACK	1 fun food 1 calcium serve 1 fluid	1 piece carrot cake 1 glass flavoured milk Tea / coffee / water
DINNER <i>Between 6 and 8 pm</i>	1 carbohydrate serve 1 protein serve 1 fat/oil serve 1 vegetable serve 1 fruit serve	1 cup cooked rice 3/4 cup beef mince 1 teaspoon sesame oil Onion, capsicum & beans 1 cup juice
SUPPER	1 fruit serve 1 calcium serve 1 fluid	6 dried apricot halves / banana 1 cup hot chocolate Tea / coffee / water

REFERENCES

1. Hart S, Marnane C, McMaster C, Thomas A. Development of the “Recovery from Eating Disorders for Life” Food Guide (REAL Food Guide) - a food pyramid for adults with an eating disorder. *Journal of Eating Disorders* 2018;6:6 <https://doi.org/10.1186/s40337-018-0192-4>
2. Cordery H, Waller G. Nutritional knowledge of health care professionals working in the eating disorders. *European Eating Disorders Review* 2016;14:462–7.
3. Ozier AD, Henry BW. Position of the American dietetic association: nutrition intervention in the treatment of eating disorders. *Journal of the American Dietetic Association* 2011;111(8):1236–41.
4. Hay P, Chinn D, Forbes D, Madden S, Newton R, Sugenor L, Touyz S, Ward W. Royal Australian and New Zealand College of Psychiatrists clinical practice guidelines for the treatment of eating disorders. *Australian and New Zealand Journal of Psychiatry* 2014;48(11):1-62.
5. Holli BB, Calabrese RJ, O’Sullivan-Maillet J. Communication and education skills for dietetics professionals. 4th Edition. Lippincott, Williams and Wilkins: London, 2003.
6. Innes NT, Clough BA, Casey LM. Assessing treatment barriers in eating disorders: A systematic review. *Eating Disorders* 2017;25:1, 1-21. DOI: 10.1080/10640266.2016.1207455
7. Cant RP, Pomeroy SEM. General practitioners’ decision to refer patients to dietitians: insight into the clinical reasoning process. *Australian Journal of Primary Health* 2010;16;147–53.
8. Waller G, Cordery H, Corstorphine E, Hinrichsen H, Lawson R, Mountford V, Russell K. *Cognitive Behavioral Therapy for Eating Disorders: A Comprehensive Treatment Guide* 1st Edition. Cambridge University Press, 2007.
9. Fairburn CG. *Cognitive Behavior Therapy and Eating Disorders*. 2008 Guilford Publications, New York, United States, 2008.
10. Jagielska G, Przedlacki J, Bartoszewicz Z, Racicka E. Bone mineralization disorders as a complication of anorexia nervosa- etiology, prevalence, course and treatment. *Psychiatria Polska* 2016;50(3):509–20.
11. Zuromski KL, Witte TK, Smith AR, Goodwin N, Bodell LP, Bartlett M, Siegfried N. Increased prevalence of vegetarianism among women with eating pathology. *Eating Behaviors* 2015;19;24–7.
12. Ahmad Fuzi SF, Koller D, Bruggraber S, Pereira DIA, Dainty JR, Mushtaq S. A 1-h time interval between a meal containing iron and consumption of tea attenuates the inhibitory effects on iron absorption: a controlled trial in a cohort of healthy UK women using a stable iron isotope. *American Journal Clinical Nutrition* 2017;106:1413–21.
13. Hart S, Abraham S, Franklin RC, Russell J. The reasons why eating disorder patients drink. *European Eating Disorder Review* 2011;19(2):121-8. doi: 10.1002/erv.1051.
14. Hart S, Abraham S, Luscombe G, Russell J. Fluid intake in patients with eating disorders. *International Journal of Eating Disorders*. 2005;38:55–9.
15. Santanso P, Sala A, Favaro A. Water Intoxication in anorexia nervosa: a case report. *International Journal of eating disorders*.1998 Dec;24(4):439-42.
16. Nutrient Reference Values for Australia and New Zealand. National Health and Medical Research Council, Australian Government. <https://www.nrv.gov.au>.
17. Chiurazzi C, Cioffi I, De Caprio C, De Filippo E, Marra M, Sammarco R, Di Guglielmo ML, Contaldo F, Pasanisi F. Adequacy of nutrient intake in women with restrictive anorexia nervosa. *Nutrition*. 2017;38:80–4.
18. Allen KL, Mori TA, Beilin L, Byrne SM, Hickling S, Oddy WH. Dietary intake in population-based adolescents: support for a relationship between eating disorder symptoms, low fatty acid intake and depressive symptoms. *Journal of Human Nutrition and Dietetics* 2013;26:459–69.
19. Steinglass J, Albano AM, Simpson HB, Schebendach J, Attia E. Fear of food as a treatment target: exposure and response prevention for anorexia nervosa in an open series. *International Journal of Eating Disorders* 2012;45(4):615–21.
20. Santiago A, Zimmerman J, Feinstein R, Fisher M. Diet quality of adolescents with eating disorders. *International Journal of Adolescent Medical Health*. 2017; <https://doi.org/10.1515/ijamh-2017-0033>.
21. Buralassi A, Ramacciotti CE, Bianchi M, Coli E, Polese L, Bondi E, Massimetti G, Dell’osso L.

- Caffeine consumption among eating disorder patients: epidemiology, motivations, and potential of abuse. *Eating and Weight Disorders* 2009; 14(4):e212–8.
22. Brown TA, Keel PK. What contributes to excessive diet soda intake in eating disorders: appetitive drive, weight concerns, or both? *Eat Disorders* 2013;21(3): 265–74.
 23. Schebendach J, Klein DA, Mayer LES, Attia E, Devlin MJ, Foltin RW, Walsh BT. Assessment of the motivation to use artificial sweetener among individuals with an eating disorder. *Appetite* 2017;109:131–6.
 24. Schuldts JP, Muller D, Schwarz N. The “Fair Trade” Effect: Health Halos From Social Ethics Claims. *Social Psychological and Personality Science* 2012; 3(5) 581-589