



*20 Dietitian
recommended
ways to feel
fuller on fewer
calories*

What is "Satiety"?

Before going into my strategies for feeling fuller on fewer calories I will clarify the concept of "Satiety and Energy Density". *Satiety is the feeling of satisfaction or fullness that you get after you have eaten a meal.* For any given number of calories, some foods will keep you full and satisfied until your next meal while others will make you hungry soon after you have eaten. As an example a medium size apple contains approximately 100 calories. One dried apple ring contains 16 calories. This means about 7 dried apple rings = 100 calories. When you eat an apple, you will feel a certain level of fullness. To achieve the same level of fullness with dried apple rings you will need to eat more than 7 apple rings (100 calories) meaning you will be eating more calories.



Vs



What is "Energy Density"?

Energy Density is the amount of energy/gram of food.
The calories/gram for nutrients is:

Water - 0 cal/g

Carbohydrate - 4 cal/g

Alcohol - 7 cal/g

Fiber - 4 cal/g

Protein - 4 cal/g

Fat - 9 cal/g

As you can tell fats have the highest amount of energy/gram. Lower energy density foods provide less energy per gram of food so you can eat more of them without consuming too many calories.

A strategy that works well is to combine high satiety foods with low energy density foods. When you do this your hunger is much more controlled and you may even lose weight.



Reference:

https://www.nutrition.org.uk/attachments/423_13209%20BNF%20feed%20Poster_PRINT_2.pdf

1. Eat foods low in energy density

High energy density foods provide a large amount of calories in a small portion of food e.g. processed foods, cakes, cookies, candies, fried chicken, French fries and so on. Plant foods like nuts and dried fruit are also energy dense, so portion control is important.

Low energy dense foods, in contrast, provide a fewer amount of calories in the same amount of food and tend to be moist or juicy. Hence you can eat larger portions of these foods. They often have a high percentage of fiber, which retains their natural water.

What foods to choose:

Vegetables, fruits and legumes. Although nuts are high energy density, they are loaded with healthy fat, hence must be eaten in smaller portions.

2. Choose high fibre foods

Fibre is a type of carbohydrate and cannot be fully digested by your body. It has very few calories. The addition of fibre to meals reduces the energy density of foods. Fiber increases satiety by lowering the energy density and slowing down the rate at which foods pass through the digestive system.

What foods to choose:

Whole grains: Look for at least 2 g fibre/slice (To understand more about whole grains read my blog on whole grains on my website)

Cereals: look for 3 g per serving

Brown rice

Vegetables and fruits.

3. Try the complementary protein trick

Compare the feeling of satiety when you eat only a baby bel cheese and when you eat an apple with the baby bel cheese. For which one do feel fuller?

Let me introduce the complementary food trick here! Complete protein foods have all the essential amino acids. In general, animal foods such as meat, poultry, eggs, dairy and fish are complete protein sources. Incomplete protein sources have only low amounts of some of the essential amino acids. When you combine two or more foods with incomplete proteins, it forms a complete protein.

The bonus -they are high satiety and less energy dense.

Here is a list of some food pairings that make a complete protein:

- Legumes with grains, nuts, seeds or dairy
 - Grains with dairy
 - Dairy with nuts
- Dairy with nuts/seeds and legumes

And here are some common meal items that naturally complement each other's proteins:

- Beans and rice or tortillas
- Peanut butter sandwich
 - Macaroni and cheese
- Tofu with rice (or any grain)
- Hummus with pita bread
 - Yogurt with nuts
- Noodle stir-fry with peanut or sesame seed sauce
 - Lentil soup or dairy-based soup with bread
 - Whole grain cereal with milk
 - Pizza
 - Lasagna
 - Tacos filled with beans or lentils
 - Quinoa salad with black beans and feta

Complementary proteins do not need to be eaten together. As long as the day's meals supply them all, you will feel good.

4. Eat adequate amounts of lean protein

High protein foods are satiating and help to decrease hunger.

However, be cautious since they can also be energy dense due to the fat content. So choose lean proteins like fish, chicken, egg whites and so on – see some examples in table below.

Food Item	Serving size	Protein (g)	Calories
Egg, boiled	1	6	78
Sirloin steak	3 oz.	26	315
Ground beef patty, lean, broiled	3 oz.	21	230
Chicken, without skin, broiled	3 oz.	26	140
Tuna, canned, water packed	3 oz.	20	110
Pork chop, lean, grilled	3 oz.	26	172
Black beans	½ cup	7	110
Chickpeas	½ cup	7	134
Milk, whole	1 cup (8 oz.)	8	150
Milk, skim	1 cup (8 oz.)	8	86
Yoghurt, low-fat, fruit	1 cup (8 oz.)	12	240
Cheddar cheese	1 oz.	7	115

Reference: Volumetrics Weight- Control Plan, Feel fuller on fewer calories; Barbara Rolls and Robert A. Barnett

Eating more protein just because they are satiating will not decrease your weight or make you lose weight faster or make you slimmer.

The amount of protein is based on your body weight and remains the same on any calorie level. The general recommendation is 0.4 g/lb of body weight. If you are very physically active, you can go up to 0.8g/lb body weight. Some examples: if you weigh 110 lbs you would need about 40 g protein/day; if you weigh 180 lbs you would need about 65 g protein/day.

5. Reduce intake of fat

Fats are energy dense- 9 calories/g regardless of the type of fat. In my terminology: Fat makes you FAT! Yes, fats add taste and even textures to foods. And some fats are healthy as well like the ones in nuts, fish, avocado and olives, dark chocolate, chia seeds, olive oil etc. So portion control is key. Keep in mind that the body needs some amount of fat to perform its daily functions. Some vitamins need fat so the body can absorb them.

Some fat reduction strategies

- Using more herbs and spices in your cooking to enhance flavors.
- Choose broth based or heartier soups over cream or cheese based soups
 - Add sautéed mushrooms, celery, onions, garlic, other veggies, wine, low -fat chicken stock to bouillon instead of oil, butter or margarine.
 - Use non-fat condiments like mustard, relish, horseradish, salsa, soy sauce, vinegar, Worcestershire sauce, hot sauces to enhance flavors. You will be surprised how little fat you will use when these flavor enhancers are used.
- Make salsa, lemon juice, orange juice or any other juice a staple in your cooking.
 - Bake, broil, roast, microwave, steam and grill more often.
 - Invest in non-stick cooking utensils.
 - Use cooking sprays.
 - You could stir fry your veggies or meat first and then add low -sodium broth or bouillon.

6. For breakfast, lunch and dinner include 3 food groups in your meal

When you get into this habit, planning your meals each day will become very easy. Another bonus – you will be able to get all the nutrients your body needs each day.

Some examples could be a starch, protein and dairy or even starch, protein and vegetables or even protein, dairy and vegetables

7. Try to include 2 food groups for your snacks

Eating carrots with hummus are more satiating than eating carrots alone. This technique also makes the snack more nutrient dense.

When you eat carrots only, the nutrients you are getting are vitamins and minerals only but you combine them with hummus you are also getting some protein, good fats and some carbohydrates.

8. Choose non-starchy foods for your snacks.

Reserving starches for your main meals help in balancing your nutrient intake through the day.

9. DO NOT drink your calories

Calories from drinks whether it is alcohol, juice or soda are just calories. Liquid calories are also not satiating and can lead to weight gain. There is plenty of evidence to confirm that although such liquids count as calories, the body doesn't detect them the same way as it would detect solid food. When you eat calories in the form of solid food, you naturally eat less in your next meal. But when you ingest liquid calories, you do you compensate for the liquid calories by eating less. Something to think about!

10. Include heartier vegetables, lean protein, nuts and seeds in your salads.

Salad A: mixed greens, cucumber, onion, marinated beets, cabbage, carrots, some nuts and seeds, grilled chicken breast.
Salad B: mixed greens only with some cucumber and tomato.

Which one of these will be more satiating?

When you include heartier ingredients in an otherwise boring salad you get the benefit of not only taste but also making it fulfilling. My favorites to add into a salad marinated Beets and Brussel sprouts. I make a big batch that lasts me for about 1 to 1.5 weeks. My recipe: roast them first and marinate with chopped garlic, some red chilli peppers, vinegar, lemon juice, salt.

11. Drink 1 glass of water after every 2 hours.

Often people will misunderstand thirst for hunger! If you have eaten a meal about an hour ago and still feel you could do with something more, try drinking a glass of water. Wait 10 minutes. If you feel satisfied you were probably thirsty. If not, then you may still be hungry. This may be an indication that you need to plan your meals a bit better.

12. Eat soups as snacks

Soups are versatile. They can be less energy dense (except for cream and cheese based soups) yet satiating. Soups have the benefit of combining vegetables, fluids, protein, carbohydrates and convenience all in one.

13. Add vegetables to your yoghurt instead of fruit

This tip may sound a bit strange. That is how most people react when I make this suggestion. You are probably used to adding only fruit. Try yoghurt with vegetables. It maybe a new taste but worth trying. Add some salt and pepper to enhance the taste. Adding vegetables makes yoghurt not only interesting but also increases the satiety on a low energy dense budget. A clear winner!

14. Eat after every 3-4 hours

Eating equally spaced meals goes a long way in controlling your portions at each subsequent meal. This is because your blood sugars never drop below the minimum required in your body. Your body never goes into starvation mode.

On the other hand, when you have large gaps in between your meals your blood sugar drops. Later when you eat a large meal (because you are soooooo hungry) your blood sugar peaks - leading to increased insulin production leading to increased fat storage in your body and finally leading to weight gain. Therefore never lead your body into starvation mode.

15. Eat 3 meals and 1-2 snacks each day

This technique is very effective in keeping your blood sugars in check i.e. they will never drop below the minimum amount required by your body. Your body requires energy at all times to perform functions like breathing, walking, your heart beating, digestion and so on. This energy comes from blood sugars. The body performs these functions regardless of you being sleeping or awake.

16. Eat your first meal within 1 hour of waking up

This sets the tone for the day. In other words, eat a breakfast – even a small one like toast with peanut butter and a cup of milk will do. If eat late, you run the risk of eating large portions later in the day. And that can be detrimental to your weight. Eating within an hour of waking up increases your concentration, keeps you in good mood and away from cravings.

17. Make every bite nutritive (my terminology)

Train your brain to choose only foods that are nutrient packed as opposed to those that are calorie packed like butter, candy, doughnuts, chips etc.

18. Think of hummus, tzatziki, avocado as sandwich spreads.

Get creative. Using foods like hummus, tzatziki, avocado will increase the satiety value of your favorite sandwich. They will also add nutrients making your sandwich nutritive.

19. Read the nutrition facts label

I know this can get complicated. But here is a good start:

- If the calories for the serving size are fewer than the grams for the serving size: Go for it.

Example – Salsa

Serving size: 2 tbsp. (33g) Calories/serving: 15

- If the calories for the serving size are the same or up to twice as many grams for the serving size: you may want to start thinking portion control or avoid as much as possible.

Example – Refried beans

Serving size: ½ cup (124g) Calories/serving: 123

- If the calories for the serving size are more than twice the grams for the serving size: you need to limit your portions right away.

Example – Tuna in oil

Serving size: 2 oz. (56g) Calories/serving: 112

Reference: The Volumetrics Eating Plan, Barbara Rolls

20. SLOW DOWN when eating your meals and snacks. Savor each bite.

Believe it or not savoring each bite that you put into your mouth will increase your satiety multi-fold. So slow down and enjoy every bite that you put in your mouth. You will not regret it.