

EATING FOR RECOVERY AFTER TRAINING

The role of the post-training meal or snack is to refuel, rehydrate and repair. Carbohydrates replenish glycogen stores (carbohydrate stores in muscle and liver); water and sport drinks correct fluid and/or electrolytes lost through sweat; and protein helps repair muscle tissue and red blood cells. Providing adequate nutrition also supports the immune system, decreasing our risk of getting sick. This means that you can train consistently without annoying breaks to recover from colds and flus!

Training is the stimulus for protein and glycogen resynthesis so providing the body with the fuel and building blocks it needs after a training session will allow it to recover quickly and adapt to the training stimulus. This can be seen as the 'window of opportunity' to maximise your speedy recovery by refuelling and rebuilding with carbohydrate and protein. Although this is a great opportunity to maximise the rate at which your body replenishes glycogen and repairs muscle tissue via protein, meeting your overall target or requirement for the day is most important.(1)

If your goals are to increase fitness, strength, power, endurance, change your body composition or to turn your body into an energy burning machine by building lean muscle (increase metabolism), then there is a lot to be gained by giving your body the fuel and building blocks it needs to recover fast for your next session! You can imagine if you're lacking in energy and your muscles feel like they are still recovering, you're not going to be able to give it your best effort in your 'harder session' compromising your strength and fitness gains.

What if you're on an energy budget or trying to lose weight during training?

For a speedy recovery the same rules exist but you need to look at your total energy intake. We know weight loss requires an energy deficit (energy out to be higher than energy in) but smart timing of meals and snacks around training is the key. Not only does carbohydrate refuel the glycogen it also stimulates an increase in the hormone insulin, which stimulates the muscle to take up the amino acids (protein).

The easiest way to tick all boxes is to schedule your training so it is followed by a main meal or snack containing both protein and carbohydrate. This time is preferably within about 60 minutes. This way you're not eating additional food and kilojoules. Eating a meal or snack with protein after exercise may also help with satiety (keeping you feeling full).

Some people have a poor appetite immediately after training and a main meal may be difficult. If so, a chilled liquid that is easy to digest may be preferable and then ensuring a main meal is eaten within the next 2-4 hours.

RECIPE

TUNA AND POTATOE SALAD

2 medium potatoes, unpeeled and quartered

200g green beans, topped and tailed

½ stick celery, thinly sliced

6 olives

3 tablespoons chives

1 180g can tuna in oil, drained

1 lemon, juiced

2 tsp. olive oil

1 tbsp. Dijon mustard

5 mint leaves, chopped

1) Steam potatoes until tender, set aside. Blanch green beans, set aside. Combine potatoes, beans, celery, olives, chives and tuna in a bowl. Combine lemon juice, olive oil and mustard, mix well. Serve and drizzle with salad dressing. • Garnish with mint

EAT PROTEIN FOR BREAKFAST TO CONTROL APPETITE

Science has confirmed what dietitians have been suggesting for weight management for years: have your toast (or bagel or pancakes) with a side of eggs or yoghurt. The protein will help curb your appetite.

Researchers at the University of Missouri's Department of Exercise Physiology, in conjunction with the food science company Mérieux NutriSciences, found that women who ate a protein-rich breakfast reported feeling fuller and more satiated in the hours between breakfast and lunch than those who consumed mostly carbohydrates or ate no breakfast.

All of the breakfasts served in the study were 1255 kilojoules and contained similar quantities of fibre and fat. The high-protein breakfast – eggs and sausage – had 30 to 39 grams of protein. The low-protein breakfast was pancakes with syrup, which has about 8 grams of protein.

Study subjects who ate the high-protein breakfast also consumed fewer kilojoules at lunch, compared with the low-protein and no-breakfast groups.

The research was presented yesterday at the Obesity Society's annual conference and comes on the heels of a study published earlier this year that found that women who reported eating protein had lost weight.

ALMONDS HELP CURB HUNGER

The nutrient-dense nut fills you up without risk of weight gain, researchers say.

If you've steered clear of almonds for fear of excess kilojoules, a new study may prompt you to reconsider the nutrient-dense nut. Nutrition scientists at Purdue University, US, found that subjects who snacked on dry-roasted almonds curbed their appetite without gaining weight.

In the study, 137 adults who were at risk for Type 2 diabetes were divided into five groups.

One group avoided all nuts and seeds, while the others ate 40 grams of almonds daily (about 35 nuts) for four weeks either with their breakfast or lunch, or as a morning or afternoon snack. The snack groups consumed the nuts about two hours after a meal and two hours before their next meal.

Despite consuming 1045 kilojoules from almonds, participants' total kilojoule intake did not increase and they did not gain weight during the month-long experiment, according to the study.

The new research was published in the *European Journal of Clinical Nutrition*.

Richard Mattes, Ph.D., a professor of nutrition science at Purdue and the study's lead author, says subjects adjusted their diet because they didn't feel as hungry between meals and during meals, particularly among the groups that snacked on almonds.

One likely reason for the feeling of satiation is almonds' combination of protein, fibre and monounsaturated fat – slow-digesting nutrients that can make you feel fuller longer than if you'd eaten only carbohydrates.

Mattes and his colleagues also believe that, based on previous research, not all of almonds' kilojoules are absorbed by the body. Whole almonds, the researchers suggest, may contain 20 per cent fewer kilojoules than the Nutrition Facts Panel states because the rigidity of the cells inhibit absorption.

"This research suggests that almonds may be a good snack option, especially for those concerned about weight," Mattes says.

Subjects in this study also had increased vitamin E levels compared to control. Vitamin E is a hard-to-get antioxidant that aids heart health.