

ISABODY

CHALLENGE®

Performance Nutrition Guide



ISAGENIX

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Isagenix Customer since 2014




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WELCOME TO THE ISABODY PERFORMANCE GUIDE!

Whether you've switched your fitness goals, are ready to start building some lean muscle or you'd like to take your performance up a notch, this guide is here to help you crush your next 16-week IsaBody Challenge.

With tips on nutrient timings, meal prepping, example athlete schedules and myth busters, this Performance Guide will set you up for success and help you to reach your health and fitness goals.

Now let's make this your best IsaBody Challenge yet!



Limitations exist
only if you let them

CARBOHYDRATES

Although carbohydrates are a proven fuel source for athletic performance, the rise and popularity of no-sugar and low-carb diets means many active individuals often fall short of their carbohydrate intake requirements. Although consuming too many carbohydrates can slow your progress to your toning goals, not eating enough can significantly affect your performance through fatigue, impaired skill and concentration, and increased perception of effort (when the workout feels harder than it should)¹. Insufficient carbohydrate intake may also compromise immune function and increase risk of injury².

Daily needs for fuelling and recovery

When you're competing or training at high intensity, it's important to consume carbohydrates to help the muscles and central nervous system perform properly. The below recommendations should be fine-tuned to your total energy needs, specific training and recovery.

When exercise quality or intensity is less important, you can simply adjust your carbohydrate intake to your energy goals, food preferences and availability.

If the focus of your training is enhancing adaptations, you may deliberately reduce your carbohydrate intake, or manipulate it around training sessions by training in a fasted state or undertaking a second training session without refuelling in between.

	SITUATION	CARBOHYDRATE TARGETS
Light	Low-intensity or skill-based activities	3-5 g/kg of athlete's body weight/day
Moderate	Moderate exercise program (e.g. <1h per day)	5-7 g/kg/day
High	Endurance program (e.g. 1-3h/day mod-high intensity exercise)	6-10 g/kg/day
Very High	Extreme commitment (e.g. >4-5h/day mod-high intensity exercise)	8-12 g/kg/day



Acute fuelling strategies

The following guidelines promote high carbohydrate availability to support optimal performance in competition or key training sessions.

	SITUATION	CARBOHYDRATE TARGETS	ADDITIONAL COMMENTS
General fuelling up	Preparation for events < 90 min exercise	7-12 g/kg per 24 h as for daily fuel needs	Choose carb-rich, low-fibre, convenient sources to meet fuel targets and goals for gut comfort or lighter 'racing weight'
Carbohydrate loading	Preparation for events > 90 mins of sustained/intermittent exercise	36-48 h of 10-12 g/kg body weight per 24 h	
Speedy refuelling	<8h recovery between 2 fuel-demanding sessions	1-1.2 g/kg/h for first 4h then resume daily fuel needs	<ul style="list-style-type: none"> • There may be benefits in consuming small, regular snacks • Carb-rich foods and drinks may help you meet fuel targets
Pre-event fuelling	Before exercise > 60 mins	1-4 g/kg consumed 1-4 h before exercise	

Adapted from Burke LM, Hawley JA, Wong SH, Jeukendrup AE. Carbohydrates for training and competition. Journal of Sports Sciences. 2011; 29(Suppl 1): S17-27.



PROTEIN

Thanks to its role in muscle growth and repair, few nutrients receive more attention than protein. As well as red meat, poultry, fish, dairy, eggs, nuts, tofu and legumes, IsaLean™ Bars, IsaLean™ Shakes and IsaLean™ PRO Shakes are good sources of protein.

How much protein do you need?

Endurance athletes in heavy training, athletes trying to gain muscle mass and strength athletes in the early stages of training all have higher protein needs than the general, non-exercising population. Most athletes will reach their daily total protein targets with their usual eating habits but vegetarian and vegan athletes may have difficulty if their diets are not carefully planned. This is where IsaLean™ Plant-Based Shakes and Bars are key.

Does the type of protein really matter?

The nutritional value of a protein is determined by its amino acid profile. Proteins with a high biological value (HBV) – animal proteins including dairy, eggs, meat, fish and poultry – are recommended wherever possible. These proteins contain all essential amino acids (EAAs) needed by the body. Plant-based proteins contain only some EAAs and are considered to be of lower biological value. Many plant-based protein sources need to be combined – like the brown rice and pea protein in Isagenix plant-based products – to be considered ‘complete’.

Leucine, a branched chain amino-acid (BCAA), plays a critical role in muscle protein synthesis (MPS). The leucine content of foods varies but some foods, like milk, whey protein and red meat are naturally high in leucine. Many plant-based protein supplements can fall short when it comes to leucine content, but the clever blend of plant proteins in IsaLean Plant-Based products ensures that adequate amounts of leucine are delivered. Research suggests that ~700-3000 mg of leucine is required to stimulate MPS, along with a balanced array of EAAs³.

Does the timing of protein intake make a difference?

Research suggests that each time protein is consumed, there is a small spike in MPS with 20-40 g of HBV protein producing a maximal response; eating more than this offers no further benefit³. Pacing protein across the day by including it in meals and snacks will produce more ‘spikes’ and switch on the muscle-building machinery more often. Eating protein in the hour following exercise can help to extend the protein synthesis response to exercise, helping to promote muscle gains and minimise muscle breakdown. (See *Recovery section*)

How much protein do I need?

	PROTEIN AMOUNT	COMMENTS
RDI for protein (women 30-60y)	0.75 g/kg BW	Based on the minimum amount required to prevent deficiency but higher protein requirement have been shown to support building and maintaining muscle mass
RDI for protein (men 30-60y)	0.84 g/kg BW	
Protein for athletes	1.4-2.0 g/kg BW	Higher intakes have shown to have a positive effect on muscle building, strength and maintenance
Optimal amount of protein per meal	20-40 g	Ideally spaced evenly throughout the day, every 3-4h

Adapted from Jäger R, Kerksick CM, Campbell BI, Cribb PJ, et al. International Society of Sports Nutrition Position Stand: protein and exercise. *Journal of the International Society of Sports Nutrition* (2017) 14:20

FAT

Fats, particularly 'good' fats like those in extra virgin olive oil, avocado and nuts, have recently become more popular with the advent of low-sugar and paleo-type diets. While they are an important source of fat-soluble vitamins and antioxidants, the amount you consume needs to be considered in regards your overall health goals. If you're looking to tone up, be sure to consider the calories they contribute to the daily total. If you're goal is to gain muscle mass, these fats can be a great source of additional calories for healthy weight gain. (See *Fat Ready Reckoner*)

A Note on Alcohol

It may seem strange to discuss alcohol amid carbohydrate and protein recommendations for sport, but many athletes fall short of their personal goals from a lack of knowledge on this unsuspectingly significant source of calories. Alcohol is best kept to a minimum if you have performance goals on your radar. If leanness and tone is the goal, alcohol contributes nearly the same amount of calories as fat (fat delivers 9 kcal/g; alcohol delivers 7 kcal/g), making the caloric density of a shot of whiskey more like a shot of olive oil! And for those with recovery goals from a higher training load, Furthermore, alcohol can impair recovery and may cause swelling and inflammation in sore muscles, so steer clear if you have a high training load⁴.



PRE-WORKOUT

You've made time to train – now make it count! Getting the right nutrients into your body at the right time is something that many athletes struggle with, but it can make a significant difference to the way that you train and recover between exercise sessions. The nutritional goals of pre-workout supplements and routines should:

- Help to improve focus and concentration
- Support blood flow and enhance nutrient delivery
- Support optimal muscle function

It's been said that poor nutrition choices can turn a champion into a mediocre athlete – this holds true when it comes to nutrient timing. Whether you are an athlete at the peak of your career, a weekend warrior who is serious about training and performance or you're looking to take your game to the next level, the right combination and timing of nutrients can make a significant difference to how you show up and back up after a training session or event.

AMPED™ NOx

When: 2-24 hours before exercise; consistent daily use most effective

Key ingredients: Nitrates from beetroot, spinach and celery and polyphenols from grape, cherry and pomegranate.

How it works: Nitric oxide helps blood vessels function normally during exercise and promotes better oxygen delivery. The result: enhanced muscle efficiency so that you can train harder for longer.

Best for: Improving performance and stamina during high-intensity exercise. Athletes training or competing at altitude (a low oxygen environment) may also benefit from nitrate supplementation. Current research suggests that endurance sports, cycling, rowing, running and weight lifting are likely to see benefits with supplementation⁵.

Maximum dose: 2 bottles per day



AMPED™ Nitro

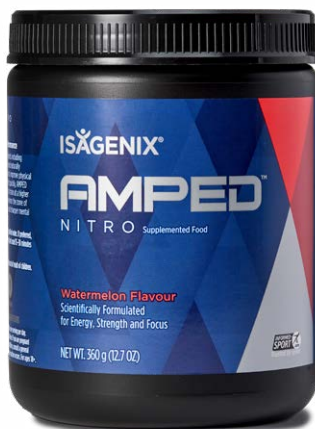
When: 15-30 minutes before exercise

Key ingredients: Creatine monohydrate, caffeine, beta-alanine, Nitrosigine®

How it works: Creatine enhances resting levels of creatine phosphate in muscle cells, which helps to recover energy during rest phases of high-intensity exercise⁶. Caffeine supports mental focus and drive; beta-alanine supports intramuscular buffering capacity and Nitrosigine® is a bioavailable source of arginine, which also supports blood flow⁷.

Best for: Athletes looking to increase strength during workouts, particularly those undertaking resistance training programs to increase lean muscle mass. Best suited for throwers, sprinters, weight lifters, soccer and football players, racquet sports players and endurance athletes.

Maximum dose: 2 scoops per day



e+

When: 10-15 minutes before exercise; during prolonged exercise

Key ingredients: Caffeine from green tea and yerba mate plus an adaptogenic blend that supports mental focus, concentration and energy.

How it works: Caffeine improves cognitive function during exercise by altering perception of fatigue and heightening concentration and alertness. Adaptogens support stamina, focus and physical endurance during exercise. The combination of caffeine and adaptogens provides an energy boost, fights fatigue and can improve athletic performance.

Best for: Improving endurance, power and strength and delaying fatigue. May also help to improve concentration, helpful for sports like golf or where reaction time is crucial, e.g. a goalkeeper.

Maximum dose: 2 bottles per day



A few things you should know about AMPED:

All AMPED products are certified by Informed-Sport. This certification is the most globally-recognised safety assurance for athletes, and every product batch is tested and screened for over 160 substances that have been banned by WADA and may pose a threat in terms of product contamination. Go to www.informed-sport.com and search 'Isagenix' for more information.

All AMPED products have also been designed to be taken together, including e+ and AMPED Nitro. Just be aware of the additional caffeine in e+ when taking Nitro, especially if you're caffeine sensitive. One scoop AMPED Nitro + one e+ contains 190mg caffeine, about what you would get from a double shot espresso or a long black.

MID-WORKOUT

During exercise, your nutrient goals need to support optimal hydration practices, maintain mental focus and support optimal blood flow to deliver fuel to working muscles and facilitate a speedy recovery.

AMPED™ Hydrate

When: During exercise. Hydrate can also be used before and after exercise to support continued hydration

Key ingredients: electrolytes, B vitamins, Vitamin C

How it works: The body loses vitamins, electrolytes and water during exercise. Proper hydration is important to performance during exercise and recovery when exercise is intense or prolonged. Replenishing fluid and electrolytes before, during and after exercise can improve performance, stimulate thirst – which leads to better hydration practices – and support recovery.

Better hydration = improved blood flow = optimal recovery.

Best for: Any moderate to high-intensity exercise where sweat loss may impact hydration levels

Maximum dose: 2 sticks (4 serves) per day



AMPED™ BCAA Plus

When: Anytime during your workout

Key ingredients: BCAAs including Leucine, Isoleucine and Valine, L-carnitine

How it works: BCAAs are key essential amino acids. Leucine stimulates muscle protein synthesis – the repair and growth of new muscle – while isoleucine and valine stimulate nutrient uptake by cells.

Best for: Optimising performance during exercise, particularly heavy or intensive training

Maximum dose: 2 scoops per day



POST-WORKOUT

You've trained hard, now it's time to provide your body with the nutrients it needs to help it recover and repair. The goals of the post-exercise period are to refuel, rebuild and rehydrate muscles as soon as possible after finishing exercise. Note that the 'window' of recovery is at its peak within 30-60 minutes after exercise, but you should focus on recovery nutrition in the 24-48 hours after exercise, particularly if it was intense and/or prolonged.

AMPED™ Post-Workout

When: 15-30 minutes post-exercise.

Key ingredients: Tart Cherry, Turmeric, Astaxanthin and Collagen Peptides.

How it works: Key phytonutrients to aid muscle recovery and soreness, and collagen for joint health and movement.

Best for: Immediately after completing a training session.

Maximum dose: 2 scoops per day.



Protein for Recovery:

IsaPro™ is a high-quality undenatured whey protein concentrate with 18 grams of protein per scoop. It can be used to add extra protein to any meal or snack and can be ideal if starting a weight-loss or workout program, breaking through a weight-loss plateau or dealing with age-related muscle loss.

Best for: If your next meal soon after training, if calorie 'budget' is small; if training is resistance-based. 1 scoop suits most; 2 scoops for higher protein requirements or aggressive muscle gain goals.

IsaLean™ Shake is a complete meal delivering 24 g protein and 24 g carbohydrate. This amount of protein and carbohydrate suits the post-workout protein requirements of most individuals.

Best for: When the end of training coincides with a meal, i.e. breakfast. Note that additional carbohydrate may be required for those with higher fuel targets.

IsaLean™ PRO is a complete meal post-workout packing 36 grams of protein, perfect for individuals requiring greater protein targets than an IsaLean Shake delivers.

Best for: When the end of training coincides with a meal, i.e. breakfast, and a higher amount of protein is desired, e.g. if undertaking a new training regime, moving through a weight loss plateau, recovery targets for individuals with a larger build and/or older adults. May be consumed as part of meal plan with additional carbohydrate requirements.



AESTHETIC/FITNESS PERFORMANCE

Melissa is participating in her first fitness competition. She is starting a new program with a specialised trainer who knows how to periodise her training in the lead up to the competition.

Age: 28

Height: 172 cm

Weight: 62 kg

Goal: 58-60 kg to tone up and increase muscle definition

Occupation: school teacher (moderately active)

Macronutrient targets:

TOTAL CALORIES: 1600 Cal to lose -0.5 kg/wk (2100 Cal/day to maintain current weight)

PROTEIN: 140 g/day (2.3 g/kg BW/day)

CHO: 150 g/day (2.5 g/kg BW/day)

FAT: 50 g/day (calculated with remaining calories)

NOTES: The focus for Melissa is to maintain muscle mass and promote growth for definition, so a higher protein intake is recommended. Carbohydrate intake is low but allows for flexibility and fuelling. 50 g fat will help with post-meal satiety while delivering fat-soluble vitamins.

This is a general guide only. Speak to your GP or Dietitian about a personalised meal plan.



What this looks like on any given day...

		PROTEIN	CHO
5:00 am	30 mL Ionix Supreme upon waking		
5:30 am	1 scoop AMPED Nitro + 1 AMPED NOx + 1 e+		
6:00 am	Gym (it's leg day!) - 2 scoops AMPED BCAA Plus		
7:00 am	1 Scoop IsaPro or 2 scoops AMPED Post-Workout immediately post workout	18 g	
8:00 am	1 pc sourdough bread		20 g
	2 eggs	12 g	
	15 g avocado (1 Tbsp)		
10:00 am	1 cup vegetable crudites		5 g
	2 Tbsp hummus		5 g
1:00 pm	½ cup brown rice		25 g
	1 small tin tuna (95 g, oil drained)	30 g	
	1 cup broccoli florets		5 g
4:00 pm	1 IsaLean PRO	36 g	21 g
6:00 pm	100 g (raw wt.) chicken breast	22 g	
	1 cup non-starchy vegetables		15 g
	250 g SlimPasta noodles		
	1 Tbsp olive oil		
9:00 pm	IsaLean 'custard'		
	2 Tbsp plain Greek yoghurt	5 g	
	½ scoop IsaLean Shake	6 g	6 g
	1 tsp Stevia to sweeten if desired		
Totals*		140 g	150 g

*please note that totals reflect additional protein and carbohydrate found in minor amounts in foods. The amounts shown on the right are intended to guide substitutions.

Suggestions for Melissa:

- e+: keep on hand for an afternoon pick-me-up
- IsaDelight™: 1 square for when chocolate cravings strike!
- Water throughout the day
- Black/herbal tea and/or black coffee during the day
- Sparkling water, flavoured with 1 drop of Essence by Isagenix Lemon or Peppermint oil for a treat
- Diffuse or topically apply Content™ Essential Oil blend to encourage feelings of satiety and appetite control

HYPERTROPHY/ STRENGTH ATHLETE

Harry is a footballer who wants to bulk up and gain strength and size for an on-field advantage.

Age: 19

Height: 187 cm

Weight: 77 kg

Goal: 80-82 kg and increase lean mass

Occupation: apprentice mechanic (moderately active)

Trains: 3 field sessions plus 3 weights per week

Macronutrient targets:

TOTAL CALORIES: 4200 Cal to gain -0.5-1.0 kg/wk (3200 Cal/day to maintain weight)

PROTEIN: 180-240 g/day (2.3-3.1 g/kg BW/day)

CHO: 450-600 g/day (6-8 g/kg BW/day)

FAT: 80-100 g/day (calculated with remaining calories)

NOTES: Harry's focus is to maintain muscle mass and promote growth for size and strength, so a higher protein intake is suggested. The macronutrient that is often lacking is carbohydrate, but this is the fuel to drive muscle building! Carbohydrate requirements are quite high and essential for delivering the energy needed to promote hypertrophy. Meeting fat requirements will help to provide additional energy and deliver fat-soluble vitamins.

This is a general guide only. Speak to your GP or Dietitian about a personalised meal plan.



Notes for Harry:

- The additional serve of AMPED Nitro in the morning is designed to deliver creatine and beta-alanine to support hypertrophy goals
- The spread of IsaLean Shake and IsaLean PRO helps to achieve protein pacing and consistency throughout the day
- Don't be afraid of some sugars! They are necessary to achieve carbohydrate targets and fuel muscle growth and development. It's virtually impossible to do this with brown rice and quinoa.
- Bread rolls and/or juice with meals can help to boost carbohydrate intake

What this looks like on any given day...

		PROTEIN	CHO
7:00 am	30 mL Ionix Supreme		
	1 scoop AMPED Nitro		9 g
7:15 am	2 cups breakfast cereal (e.g. Sultana Bran)	12 g	78 g
	1 cup low-fat milk	8 g	12 g
	IsaLean Shake	24 g	24 g
	1 banana		25 g
8:00 am	(starts work)		
10:00 am	1 serve of Athlete's Brownie Slice (<i>see recipe</i>)	5 g	40 g
	1 pc fruit		25 g
12:00 pm	2 cheese & salad sandwiches		
	4 pc bread		60 g
	4 cheese slices	30 g	
	½ avocado		
	500 mL juice		50 g
3:00 pm	IsaLean PRO	36 g	21 g
	2 Tbsp honey		35 g
5:00 pm	(finishes work, straight to footy training)		
	Pre-training		
	1 scoop AMPED Nitro		9 g
	½ stick AMPED Hydrate		9 g
	1 AMPED NOx		
	1 banana		25 g
5:30 pm	During training		
	½ stick AMPED Hydrate		9 g
	2 scoops AMPED BCAA Plus		7 g
7:00 pm	IsaLean PRO and AMPED Post-Workout post-training	37 g	21 g
8:00 pm	Spaghetti bolognese		
	2 cups cooked pasta		80 g
	1 cup bolognese sauce	20 g	
	1 wholemeal bread roll		40 g
10:00 pm	2 scoops IsaPro	36 g	
Totals	Total calories: 4,200	220 g	600 g

Note: additional serve of AMPED Nitro in the morning designed to deliver creatine and beta-alanine to support hypertrophy goals; note that the use of IsaLean and IsaLean PRO helps to achieve protein pacing throughout the day; some sugars are necessary to achieve carbohydrate targets and fuel muscle growth and development.



ENDURANCE ATHLETE

Anna is training for her first Olympic Distance Triathlon (1.5 km swim, 40 km bike, 10 km run) and is one month out from her race. She is at the peak of her training and needs to support her fuel requirements, recovery and hydration while trialling foods to ensure she gets it right on race day.

Age: 26

Height: 173 cm

Weight: 60 kg

Goals: Maintain her weight and get her fuel, recovery and hydration right

Occupation: Physiotherapist (moderately active)

Trains: Twice per day usually before and after work, with longer 'brick' sessions on the weekends - swim then ride or ride then run)

Macronutrient targets:

TOTAL CALORIES: 2400 Cal to maintain weight

PROTEIN: 110 g - 130 g/day (1.8-2.2 g/kg BW/day)

CHO: 300-350 g/day (5-6 g/kg BW/day)

FAT: 45-50 g/day (calculated with remaining calories)

NOTES: Anna needs to ensure adequate post-exercise protein for recovery and repair. Carbohydrate requirements are high to fuel training demands and minimise injury risk. Fat recommendations are relatively low to prioritise carbohydrate and protein, but enough to deliver fat-soluble vitamins.

This is a general guide only. Speak to your GP or Dietitian about a personalised meal plan.

What this looks like on any given day...

		PROTEIN	CHO
5:30 am	30 mL Ionix Supreme upon waking		
	1 scoop AMPED Nitro		
	1 AMPED NOx		
	2 pc toast		40 g
	1 Tbsp honey		20 g
	1 banana		25 g
6:00 am-7:30 am	40 km Ride		
	During ride		
	½ stick AMPED Hydrate		9 g
	1 e+		
Post-exercise	2 scoops AMPED Post-Workout		7 g
8:30 am	IsaLean Shake	24 g	24 g
10:30 am	200 g tub low-fat flavoured Greek yoghurt	12 g	21 g
	2 cups diced watermelon		20 g
1:00 pm	1 serve of vegetarian pasta salad		
	1 ½ cups dry pasta, cooked	10 g	60 g
	1 Tbsp pesto		
	1 cup roast pumpkin/swt potato		10 g
	1 cup spinach		
	½ avocado		10 g
3:30 pm	IsaLean 'custard'		
	1 scoop IsaLean Shake	12 g	12 g
	4 Tbsp plain low-fat Greek yoghurt		
	Stevia, to sweeten		
5:00 pm	e+ before 10 km easy run		
6:30 pm	Salmon patties with salad		
	2 salmon patties	25 g	25 g
	2 cups garden salad		
	1 wholemeal bread roll		40 g
8:30 pm	½ punnet (125 g) strawberries		10 g
Totals	Total calories: 2,400	135 g	335 g

Myth-BUSTED: Should I eat before exercise?

This is one of the most frequently asked questions, but the answer is dependent on a few variables.

- 1. The goal of the exercise session** Is it to facilitate weight loss or drive performance? Light-moderate intensity training can usually be performed on an empty stomach. If you're looking at a higher-quality workout, fuelling before exercise may be preferable. While it is logical to assume that fasted exercise would yield a fat-burning advantage, a recent study demonstrated similar weight loss results between those who trained fed versus fasted⁸.
- 2. The type of exercise** If you're training at a lower intensity, your body has more time to use oxygen (aerobic exercise) which means a higher percentage of calories comes from fat, as well as some carbohydrate. If you're performing at higher intensity and/or for longer, then you'll most likely feel better training after consuming carbohydrates, as unlike fat stores, carbohydrate stores in the body are limited.
- 3. The time of day** For some individuals training first thing in the morning, it can be difficult to eat so early. While there are some physiological adaptations that occur when training in the fasted state (muscle cells get better at burning fat), consuming carbs the night before or AMPED Hydrate during exercise could be helpful when you can't stomach breakfast.
- 4. Your preference** If having a shake prior to a workout helps you to feel well-fuelled to work out harder, this may be the best option for you, as more effort 'spent' in a workout is more calories burned overall. On the flipside, if you train very early in the morning or feel better training on an empty stomach, then your IsaLean Shake could be the perfect post-exercise recovery meal. Your body, your rules!

Myth-BUSTED:

Is it possible to develop a tolerance to caffeine?

Caffeine is one of the most widely studied and efficacious sports supplements and as a result, it features in many sports supplements, including our own AMPED Nitro and e+. The core performance benefit of caffeine comes from its effect on the central nervous system, resulting in a reduced perception of effort and/or a reduced perception of fatigue. Research has shown that daily caffeine consumption could contribute to a level of tolerance; some individuals who end their evening meal with a coffee have no sleep disturbance, despite consuming caffeine close to bedtime.⁹ There are two suggestions to overcome this:

1. Slightly increase your caffeine dose if you want to improve your alertness or performance. Individual responses to caffeine vary but typically doses in the range of 1-3 mg per kg are sufficient to improve performance (e.g. 70-210 mg in a 70 kg athlete). Some athletes may find higher doses (4-6 mg/kg) necessary if they've developed a tolerance through daily consumption.
2. Consider a temporary break from caffeinated products for at least two weeks to reset tolerance levels.

Note that caffeine is a naturally occurring substance and has been used for centuries in various cultures as a mild stimulant. It is absolutely safe to consume small amounts daily if this is your preference and the dose of caffeine can be slightly increased if looking for enhanced performance, particularly for a demanding training session or competition.

Myth-BUSTED:

What is the difference between whey protein concentrates? Aren't whey protein isolates more potent?

There are 3 primary forms of whey protein:

1. **Whey Protein Concentrate (WPC):** Typically 70-80% protein by weight with very small amounts of lactose and fat. In IsaPro - as well as IsaLean Shake, IsaLean PRO and IsaLean Bar - Isagenix uses a high-quality undenatured WPC that ensures that the native protein fractions remain intact. These whey fractions, such as beta-lactoglobulin, lactoferrin, immunoglobulins, serum albumin and more, have known biological activity.
2. **Whey Protein Isolate (WPI):** Usually 90% protein by weight, with negligible amounts of lactose and fat. For some, WPI is a way to guarantee purity and concentration when manufacturing and quality standards of the company are unknown. Production methods of WPI may also denature the protein.
3. **Whey Protein Hydrolysate (WPH):** Derived from WPC or WPI and characterised by shorter peptides, or amino acid chains. These are marketed to result in more rapid digestion but evidence to date is conflicting.

Isagenix is very proud of the high-quality WPC that goes into our products. We remain true to our no-compromise promise when it comes to delivering product safety, purity and potency. Just know that not all protein is equal; Isagenix chooses only the best.

TONING TIPS

1. Keep an electronic food diary – like the tracker in the IsaLife™ App – to keep your calories and macronutrient targets on track. Monitoring increases awareness and helps you to adjust your day-to-day intake. If you are having a hungry day, add in some low-calorie extras to fill you up or if you have a few calories to spare, use them wisely!
2. Vegetables, particularly non-starchy ones, are some of the best options when you don't have many calories left for the day. Typically, potatoes (including sweet potato/kumara), pumpkin, peas and corn are classed as 'starchy'. While there is some carbohydrate in vegetables, the amounts are negligible, so fill up on your greens for a nourishing meal or snack.

BULKING TIPS

BULKING TIPS

1. Start with a good training program – muscle requires the right stimulus to grow!
2. Set realistic goals – consider your training history, your body type and your genetics!
3. Support your training with a sensible, high-energy diet that provides adequate protein
4. Get organised – just as losing weight is difficult for some, gaining weight requires the same commitment and consistency
5. Eat and drink at frequent intervals and apply the protein pacing technique (20-25 g protein at each meal and snack)
6. Time meals and snacks appropriately around work, training and family commitments
7. Be patient and consistent
8. Supplements (like the AMPED range) can support training and performance when timed well around exercise
9. Monitor your progress and adjust your diet and/or training when necessary

HOW TO LOVE YOUR MEAL PREP

You've probably seen images on Instagram or Facebook of someone's kitchen bench lined with dozens of takeaway containers full of the same thing - usually chicken, broccoli and rice! And while making your meals in bulk and freezing them is a great idea to stay organised, it's still important to love what you eat every day. These meals can be made ahead and are suitable for freezing.

Choose from one of each of the following:

Protein

- Grilled/BBQ chicken
- Crumbed chicken
- Poached beef
- Roast lamb
- Grilled fish (cooked in foil)
- Tinned tuna
- Cooked mince (e.g. Bolognese sauce)
- Marinated tofu, stir-fried



Carbohydrate

- Rice (brown/basmati/black are great, including microwave varieties)
- Quinoa, cooked
- Roasted pumpkin or sweet potato
- Corn kernels
- Pearl barley
- Couscous
- Beans and legumes (e.g. red lentil dahl, homemade baked beans)



Vegetables

- Any kind of steamed or parboiled greens: broccoli, Brussels sprouts, beans, peas, spinach, Chinese broccoli, bok choy, kale
- Stir-fried vegies including tinned bamboo shoots, water chestnuts and bean sprouts
- Chow Mein-inspired vegies like cabbage, carrot, onion, garlic and spices
- Ratatouille
- Roasted vegies like beetroot, carrot, zucchini, tomatoes, capsicum and onion
- Vegie strips cooked in a sandwich press including eggplant, zucchini and capsicum





Calories / 534 Cal
 Carbohydrates / 70 g
 Protein / 10 g
 Fat / 25 g

Pesto Pasta Fuel Salad

Serves 6

Time to prepare: 15 mins

Time to cook: 60 mins

- 1 large pumpkin, diced
- 1 Tbsp olive oil
- Salt and pepper
- 6 cups dried pasta
- 1 cup Kalamata olives, pitted
- 1 medium red capsicum, chopped
- ½ small red onion, finely sliced
- 80 g baby spinach or rocket
- 1 medium avocado, chopped
- ½ cup basil pesto
- 2 Tbsp lemon juice
- Pine nuts, to serve (optional)
- Roasted cherry tomatoes to serve (optional)

1. Preheat oven to 180°C (fan-forced) and line a baking tray with grease-proof paper. Toss the pumpkin cubes with the oil in a large bowl until all of the pumpkin is coated. Season with salt and pepper to taste and bake in the oven for 35-40 mins, or until pumpkin starts to soften and brown slightly. Remove from the oven and set aside (You can do this in advance and freeze in an airtight container).
2. Cook pasta in a large saucepan of boiling water, following packet directions, until tender. Drain. Refresh under cold water. Drain.
3. Place pasta, olives, capsicum, onion, spinach and avocado in a large bowl and combine.
4. Mix pesto and lemon juice together in a separate bowl and then stir through the pasta mix. Season with salt and pepper. Refrigerate for up to three days or freeze in airtight containers for 6-8 weeks.

Nutrition information shown is without pine nuts or tomatoes.



Calories / 330 Cal
 Carbohydrates / 19 g
 Protein / 25 g
 Fat / 23 g

Simple Salmon Patties

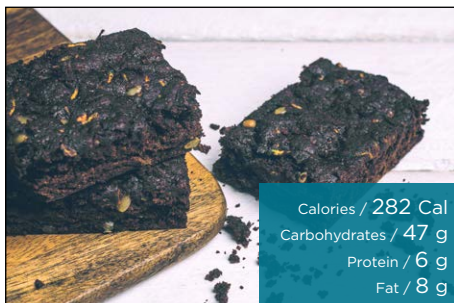
Serves 6

Time to prepare: 15 mins

Time to cook: 15 mins

- 1 medium potato, diced
- 1 medium sweet potato, diced
- 400 g can kidney beans, rinsed and drained
- 415 g can of salmon, drained
- $\frac{3}{4}$ cup almond meal
- 1 small zucchini, grated
- 1 egg, lightly beaten
- 2 Tbsp finely chopped chives
- 2 Tbsp chopped dill
- Himalayan pink salt and freshly ground black pepper, to taste
- Oil for cooking
- Rocket and spinach leaves, to serve
- Sweet chilli sauce, to serve
- Lemon or lime wedge, to serve

1. Boil, steam or microwave potato and sweet potato until cooked. Add kidney beans and mash.
2. Add salmon, almond meal, zucchini, egg, chives, dill and pepper.
3. Mix until well combined.
4. Divide into 18 portions and shape into patties.
5. Heat oil in a non-stick frying pan over medium heat. Cook patties for 1-2 minutes each side or until golden brown.
6. Serve with rocket and spinach, sweet chilli sauce and lemon or lime wedges.



Calories / 282 Cal
 Carbohydrates / 47 g
 Protein / 6 g
 Fat / 8 g

Athlete's Chocolate Brownies

Makes 12

Time to prepare: 15 min

Time to cook: 30 mins

- $\frac{3}{4}$ cup plain flour
- $\frac{3}{4}$ cup self-raising flour
- $\frac{2}{3}$ cup raw cacao powder
- 1½ cups coconut sugar
- $\frac{1}{3}$ (40 g) roughly chopped walnuts or pecans
- 200 g tub low fat vanilla-flavoured Greek yoghurt
- 60 mL ($\frac{1}{4}$ cup) light olive oil
- 4 egg whites
- 2 tsp vanilla bean paste
- Icing sugar, to dust (optional)

1. Preheat oven to 180°C and line a 30x20 cm shallow baking pan with foil.
2. Sift flours and cacao in a large bowl, then stir in sugar and walnuts and make a well in the centre.
3. Whisk yoghurt, oil, egg whites and vanilla bean paste together in a small bowl. Pour onto dry ingredients and mix lightly until just combined.
4. Spread into prepared pan and smooth the surface.
5. Bake for 30 minutes or until a skewer inserted in the centre comes out clean.
6. Leave in the tin for about 15 minutes then lift out and peel the foil away.
7. Cut into 12 squares, dust lightly with icing sugar and enjoy!

These guides are intended to provide you with the flexibility to build your own meals (and find alternatives to foods that you enjoy).

Protein Options

Each protein option listed here provides around 20 grams of protein and is around 100 calories. Note that for protein foods we have provided the information in both raw weights and cooked weights of foods. This will allow you to work with recipes or a meal where you cook from scratch, as well as to know how to serve yourself a suitable portion of a food or recipe once it is cooked.

Note also that most of the protein sources are lean and trimmed prior to cooking or eating. As you would probably guess, fatty meats are considered to be occasional treats if you choose to eat them.

Food	Amount	Calories
Meat		
Chicken breast, no skin, raw	100 g	102
Chicken breast, no skin, baked	65 g	99
Lean red meat, fat trimmed, raw	100 g	99
Lean red meat, fat trimmed, grilled	60 g	97
Premium beef mince (<5% fat), raw	75 g	100
Premium beef mince (<5% fat), cooked	60 g	108
Bacon, raw (rindless, fat trimmed)	100 g	103
Bacon, dry-grilled (rindless, fat trimmed)	70 g	100
97% fat-free ham	100 g	108
97% fat-free turkey breast	100 g	104
40% reduced-fat salami	25 g	80
Smoked salmon	75 g	100

Fish

Salmon, grilled	50 g	107
Salmon, raw	60 g	115
Tuna - in oil, drained	½ small can	84
Tuna - in brine, drained	1 small can	95
Fish, white, raw	90 g	102
Fish, white, steamed	75 g	95

Other

Egg, no fat added	2 eggs	122
Yoghurt, plain reduced-fat	150 g	80
Milk, skim	1 cup	80
Tofu, firm	130 g	93
Tempeh, cooked	50 g	98

Carbohydrate Options

These foods all have similar compositions and can be interchanged with other carbohydrate foods. Each serve of carbohydrates listed below provides around 20 grams of carbohydrate and around 100 calories.

Food	Amount	Calories
Multigrain bread	1 slice (thin)	84
Multigrain bread	1 slice (thick)	110
Wholemeal bread	1 slice (thick)	81
Bread roll (multigrain/wholemeal)	1 small/dinner roll (40 g)	99
Bread roll (multigrain/wholemeal)	½ hamburger/large (45 g)	110
Whole wheat wrap	1 tortilla (48 g) or 2 Mt bread	141
Gluten-free bread	1 slice (26 g)	63
Gluten-free wrap	1 wrap (42 g)	141
Bagel (wholemeal)	½ bagel (46 g)	121
Pita (Lebanese) bread	½ pita (42 g)	114
Potato	1 boiled potato (150 g)	100
Pumpkin	200 g boiled	98
Sweet potato	150 g boiled	110
Corn kernels	½ cup (164 g)	86
Cooked rice (white)	½ cup cooked rice (95 g)	110
Cooked rice (brown)	⅓ cup (70 g)	104
Cooked noodles e.g. buckwheat	½ cup cooked noodles (75 g)	100
Cooked noodles (rice)	½ cup (110 g)	95
Rice paper	12 sheets (24 g)	85
Cooked pasta (white)	½ cup (60 g)	79
Cooked pasta (wholemeal)	¾ cup (70 g)	92
Baked beans	½ cup (140 g)	105
Lentils	½ cup cooked (120 g)	91
Kidney beans	½ cup (95 g)	93
Chickpeas	½ cup (85 g)	99
High fibre breakfast cereal	¾ cup	108
Wheat breakfast biscuits	2 biscuits	121
Rolled oats	¼ cup (25 g)	89
Quick oats	¼ cup (25 g)	94
Quinoa	100 g	110
Couscous	⅓ cup (50 g)	80
Grainy crackers	4 biscuits	97
Corn/rice thins	4 rice cakes (24 g)	92
Fruit	1 medium piece/small handful	~100

Fat Options

Fats are an essential part of healthy eating so it is good to include small amounts of the healthy fats. Healthy fats include monounsaturated fats and polyunsaturated fats: omega-3s and omega-6s. These fats help to support heart and joint health. Healthy fats are found in most plant-based foods, seeds, nuts and fish. Each portion below provides around 10 grams of fat and around 100 calories.

Food	Amount	Calories
Almonds	15 almonds	102
Seeds (mixed)	15 g	83
Sunflower seeds	15 g	85
Cashews	15 g (10 nuts)	87
Walnuts	5 walnuts	103
Pine nuts	15 g	104
Mixed nuts	10 nuts (15 g)	80
Peanut butter spread	1 heaped tsp (15 g)	90
Avocado	30 g	60
Sour cream (light)	2 Tbsp (40 g)	87
Salad dressing	2 Tbsp (40 ml)	80
Ricotta	3 Tbsp (60 g)	104
Ricotta, reduced fat	4 Tbsp (80 g)	101
Cream cheese (full-fat)	2 Tbsp (40 g)	107
Cream cheese (light)	3 Tbsp (60 g)	107
Cream cheese (extra-light)	4 Tbsp (80 g)	105
Brie	1 portion (30 g)	103
Fetta (full-fat)	1 portion (30 g)	84
Fetta (reduced-fat)	40 g	93
Mayonnaise (full-fat)	3 tsp (15 g)	111
Coconut oil	1 Tbsp (14 g)	120





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2019 New Zealand IsaBody Challenge Finalist

References:

1. Joint Position Stand: Nutrition and Athletic Performance. *Medicine & Science in Sports & Exercise* 2016; 48 (3): 543-568
2. Burke LM, Hawley JA, Wong SH, Jeukendrup AE. Carbohydrates for training and competition. *Journal of Sports Sciences*. 2011; 29 (Suppl 1): S17-27.
3. Jäger R, Kerksick CM, Campbell BI, Cribb PJ, et al. International Society of Sports Nutrition Position Stand: protein and exercise. *Journal of the International Society of Sports Nutrition*. 2017; 14: 20
4. Jung MK, Callaci JJ, Lauing KL, et al. Alcohol exposure and mechanisms of tissue injury and repair. *Alcoholism: Clinical & Experimental Research*. 2011; 35: 392-9.
5. Bakker E, Engan H, Patrician A, Schagatay E, Karlsten T, Wisløff U, Gaustad SE. Acute dietary nitrate supplementation improves arterial endothelial function at high altitude: A double-blinded randomized controlled cross over study. *Nitric Oxide*. 2015; 50: 58
6. Hespel P, Derave W. Ergogenic effects of creatine in sports and rehabilitation. *Subcellular Biochemistry*. 2007; 46: 245-59.
7. Rood-Ojalvo S, Sandler D, Veledar E, Komorowski J. The benefits of inositol-stabilized arginine silicate as a workout ingredient. *Journal International Society of Sports Nutrition*. 2015; 12 (Suppl 1): 14.
8. Schoenfeld BJ, Aragon AA, Wilborn CD, Krieger JW, Sonmez GT. Body composition changes associated with fasted versus non-fasted aerobic exercise. *Journal of the International Society of Sports Nutrition*. 2014; 11: 54.
9. Evans, SM, Griffiths, RR. Caffeine tolerance and choice in humans. *Psychopharmacology*. 1992; 108(1-2): 51-59.

