Diet, sport and fitness

VOCABULARY PRACTICE
ADVANCED | C1

Name: _____ Date: _____

1 Match each advanced term with its definition.

1 periodisation ____	**a** the strategic planning of training phases to optimise performance and prevent overtraining
2 excess post-exercise oxygen consumption ____	**b** elevated calorie burn continuing after exercise ends, as the body recovers
3 muscle protein synthesis ____	**c** the biological process by which the body builds new muscle tissue
4 glycogen depletion ____	**d** the exhaustion of the body's stored carbohydrate reserves during prolonged exercise
5 delayed onset muscle soreness ____	**e** muscle pain and stiffness appearing a day or two after unaccustomed exercise
6 anabolic ____	**f** promoting tissue growth and building up of the body
7 catabolic ____	**g** breaking down tissue for energy
8 hormetic stress ____	**h** a moderate stressor that triggers a beneficial adaptive response in the body
9 neuromuscular adaptation ____	**i** improvements in the nervous system's ability to coordinate and recruit muscle fibres
10 nutrient timing ____	**j** the strategic scheduling of food intake around exercise to optimise performance or recovery

2 Choose the most precise term for each context.

1 Strategic planning of training phases is periodisation / random variation.

2 Elevated calorie burn continuing after exercise is excess post-exercise oxygen consumption / resting metabolism.

3 The process of building new muscle tissue is muscle protein synthesis / muscle breakdown.

4 The exhaustion of carbohydrate reserves is glycogen depletion / fat storage.

5 Muscle pain appearing a day or two after exercise is delayed onset muscle soreness / immediate fatigue.

6 Promoting tissue growth is anabolic / catabolic.

7 Breaking down tissue for energy is catabolic / anabolic.

8 A moderate stressor triggering beneficial adaptation is hormetic stress / chronic damage.

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3 **Match the verbs with the noun phrases to form academic collocations.**

1 optimise ____	**a** glycogen stores
2 trigger ____	**b** a training cycle
3 replenish ____	**c** neuromuscular adaptation
4 mitigate ____	**d** delayed onset muscle soreness
5 stimulate ____	**e** nutrient timing
6 monitor ____	**f** a hormetic response
7 periodise ____	**g** recovery markers
8 accelerate ____	**h** muscle protein synthesis

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4 Complete the analysis with terms from the box.

anabolic | catabolic | delayed onset muscle soreness | excess post-exercise oxygen consumption | glycogen depletion | hormetic stress | muscle protein synthesis | neuromuscular adaptation | nutrient timing | periodisation

Coaches applying 1 _____ structure training into distinct phases, deliberately varying intensity and volume over weeks or months to optimise long-term progress while reducing injury risk. Intense exercise elevates 2 _____, meaning the body continues burning calories at an elevated rate even after the session ends. Prolonged effort can produce 3 _____, exhausting stored carbohydrate reserves and contributing to fatigue during extended exercise. Novel or intense training frequently produces 4 _____, muscle discomfort appearing a day or two later rather than immediately. Exercise itself functions as a form of 5 _____, a moderate stressor that triggers beneficial physiological adaptation rather than simple damage. Recovery depends on shifting the body from a 6 _____ state, breaking down tissue, into an 7 _____ state that supports 8 _____, the biological process of building new muscle. Careful 9 _____, strategically timing food intake around training, can further support this process. Meanwhile, early strength gains often reflect 10 _____ rather than actual muscle growth, as the nervous system becomes more efficient at recruiting existing muscle fibres.

5 Read the text and answer the questions briefly.

Rethinking early strength gains

Exercise physiologists have long noted a puzzling phenomenon among beginners: substantial strength gains often occur within the first few weeks of resistance training, well before any visible increase in muscle size would be physiologically plausible. Research increasingly attributes this early progress primarily to neuromuscular adaptation, improvements in the nervous system's ability to recruit and coordinate existing muscle fibres, rather than genuine muscle protein synthesis and tissue growth, which typically requires considerably more time to manifest measurably. This distinction has practical implications for training expectations, since beginners experiencing rapid initial gains should not assume this rate of progress will continue indefinitely, as neuromuscular efficiency gains eventually plateau, leaving genuine hypertrophy as the primary driver of further strength improvement.

1 What puzzling phenomenon have exercise physiologists long noted? _____

2 What does research increasingly attribute this early progress primarily to? _____

3 What is neuromuscular adaptation? _____

4 Why is it not attributed to genuine muscle protein synthesis? _____

5 What practical implications does this distinction have? _____

6 What eventually becomes the primary driver of further strength improvement? _____

6 Replace the words in bold with a precise term or collocation.

1 His training was structured into distinct phases over months. _____

2 She felt muscle soreness appear a day after her workout. _____

3 His body exhausted its stored carbohydrate reserves during the race. _____

4 Her early strength gains reflected improved nervous system coordination. _____

OVER TO YOU

Write a 160-190 word critical commentary on how early strength gains differ from long-term muscle adaptation, distinguishing observation from inference.

[ ] Use at least twelve target expressions. [ ] Include four academic collocations. [ ] Maintain a precise, balanced register.

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ANSWER KEY

1 Advanced terms

1 a 2 b 3 c 4 d 5 e 6 f 7 g 8 h 9 i 10 j

2 Precise terms

1 periodisation 2 excess post-exercise oxygen consumption 3 muscle protein synthesis 4 glycogen depletion 5 delayed onset muscle soreness 6 anabolic 7 catabolic 8 hormetic stress

3 Academic collocations

1 b optimise a training cycle 2 f trigger a hormetic response 3 a replenish glycogen stores 4 d mitigate delayed onset muscle soreness
5 h stimulate muscle protein synthesis 6 g monitor recovery markers 7 b periodise... note adjust 8 c accelerate neuromuscular adaptation

4 Analysis

1 periodisation 2 excess post-exercise oxygen consumption 3 glycogen depletion 4 delayed onset muscle soreness
5 hormetic stress 6 catabolic 7 anabolic 8 muscle protein synthesis
9 nutrient timing 10 neuromuscular adaptation

5 Reading - suggested answers

1 That substantial strength gains often occur within the first few weeks, well before visible muscle growth is plausible.
2 Neuromuscular adaptation.
3 Improvements in the nervous system's ability to recruit and coordinate existing muscle fibres.
4 Because genuine muscle growth typically requires considerably more time to manifest measurably.
5 Beginners should not assume rapid initial gains will continue indefinitely.
6 Genuine hypertrophy (muscle growth).

6 Precise terms and collocations

1 periodisation 2 delayed onset muscle soreness 3 glycogen depletion 4 neuromuscular adaptation

Over to you

Answers will vary. Look for conceptual precision, evidence-aware reasoning and balanced evaluation.