Response

International Baccalaureate · IB Diploma · Sports, Exercise and Health Science · HL · Vocabulary in context

Word	Example
acute response /əˈkjuːt rɪˈspɒns/	A faster breathing rate during exercise is an **acute response**.
training adaptation /ˈtreɪnɪŋ ˌædæpˈteɪʃn/	Improved endurance after weeks of practice can be a **training adaptation**.
steady state /ˈstedi steɪt/	In a **steady state**, the body gets all the oxygen it needs for the exercise.
submaximal	A **submaximal** run is below your hardest effort.
maximum heart rate	**Maximum heart rate** is the highest rate reached during maximal effort.
stroke volume /strəʊk ˈvɒljuːm/	**Stroke volume** is the amount of blood pumped by each beat.
venous return	Muscles squeezing the veins increase **venous return** to the heart.
systolic pressure	**Systolic pressure** is the highest pressure, when the heart beats.
diastolic pressure	**Diastolic pressure** is the lowest pressure, between beats.
arteriovenous oxygen difference	The **arteriovenous oxygen difference** shows how much oxygen the muscles take from the blood.
Bohr shift /ˈbəʊə ʃɪft/	The **Bohr shift** helps working muscles get more oxygen.

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minute ventilation /ˈmɪnɪt ˌventɪˈleɪʃn/	**Minute ventilation** is how much air you breathe in one minute.
ventilatory threshold	At the **ventilatory threshold**, breathing suddenly gets much faster.
fatigue /fəˈtiːg/	**Fatigue** reduces the ability to maintain performance.
peripheral fatigue	**Peripheral fatigue** happens in the muscles themselves.
central fatigue	**Central fatigue** happens when the brain sends weaker signals.
delayed-onset muscle soreness	**Delayed-onset muscle soreness** is the pain you feel a day or two after hard exercise.
recovery /rɪˈkʌvəri/	Rest and nutrition support **recovery** after training.
active recovery	Gentle walking after a run is **active recovery**.
supercompensation	After rest, **supercompensation** makes the body a little fitter than before.
specificity /ˌspesɪˈfɪsɪti/	Training **specificity** means a swimmer should train by swimming.
progressive overload	**Progressive overload** gradually increases training demand.
reversibility /rɪˌvɜːsəˈbɪlɪti/	**Reversibility** means you lose fitness if you stop training.
individual difference	An **individual difference** explains why two athletes improve at different speeds.

Word	Example
heart rate reserve	**Heart rate reserve** is maximum heart rate minus resting heart rate.
rating of perceived exertion	A **rating of perceived exertion** records how hard the exercise feels.
percentage of maximal oxygen uptake	Running at 70% **percentage of maximal oxygen uptake** is a moderate effort. 70%
continuous training	In **continuous training**, you keep going with no rest, such as a long run.
interval training	**Interval training** alternates work periods with recovery periods.
fartlek	**Fartlek** mixes faster and slower running within one session.
resistance training	**Resistance training** makes muscles work against a load.
plyometrics	**Plyometrics** uses jumping and bouncing to build power.
circuit training	**Circuit training** moves between several exercise stations.
hypertrophy	**Hypertrophy** means the muscles get bigger.
periodisation	**Periodisation** splits the training year into planned stages.
macrocycle	A **macrocycle** is a long training period, often a season.
mesocycle	A **mesocycle** groups several weeks of related training.

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microcycle	A **microcycle** is a short training block, often one week.
taper	A **taper** reduces training load before an important competition.
bradycardia	Trained runners often have **bradycardia**: a slow resting heart rate.
mitochondria /ˌmaɪtəˈkɒndrɪə/	**Mitochondria** release energy from food.
myoglobin	**Myoglobin** stores oxygen in muscle.
neural adaptation	A **neural adaptation** helps the brain control the muscles better.
lactate threshold	Above the **lactate threshold**, lactic acid builds up quickly in the blood.
functional overreaching	**Functional overreaching** is a short dip in performance before you get stronger.
overtraining syndrome	**Overtraining syndrome** is long-lasting tiredness from training too much.
partial pressure of oxygen	At high altitude, the lower **partial pressure of oxygen** makes breathing harder.
erythropoietin	**Erythropoietin** makes the body produce more red blood cells.
heat acclimatisation	**Heat acclimatisation** helps the body cope with exercise in hot weather.
hypothermia	**Hypothermia** means the body is dangerously cold.