

SKILLS IN THE SPOTLIGHT

Define ATP and its role during a volleyball spike

Identify the predominant energy system used during a single explosive spike

Explain why the ATP-PC system is best suited to a volleyball spike

Explain how different energy systems interact during repeated spikes in volleyball

Explain the role of the fast component of EPOC following repeated spikes in volleyball

State one fuel used by the ATP-PC system during a spike

Volleyball - Spike



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ATP is the energy currency of the body; it provides energy for muscle contraction

ATP-PC system

Spike is short and explosive; ATP-PC provides immediate energy; no oxygen required

Replenishes oxygen stores; resynthesises ATP and PC; occurs quickly post-exercise; supports repeated high-intensity actions

ATP-PC system - immediate energy. Phosphocreatine stores deplete, anaerobic glycolytic system contributes ATP. Aerobic system - resynthesises ATP and PC during recovery between spikes.

Phosphocreatine (PC)

Volleyball - Spike

