








Component 1 How to Optimise Training and Prevent Injury (Performance Enhancing drugs)

Drug		Effect on performance	Health risks	Who might take it	
Anabolic Steroids		Allows performers to train longer and harder Increases protein synthesis helping develop lean muscle mass. Speeds up recovery time	<ul style="list-style-type: none"> • Liver damage • CHD • Testicular atrophy • Infertility • Mood swings/aggression 	Activities that require power: <ul style="list-style-type: none"> • Sprinters • Rugby players • Weight lifters • Boxers 	
Beta Blockers		Beta blockers slow heart rate and reduce anxiety, allowing the performer to remain calm	<ul style="list-style-type: none"> • Disturbance of sleep • Tiredness • Lower blood pressure • Slowing of heart rate 	Activities that require precision: <ul style="list-style-type: none"> • Archery • Diving • Shooting 	
Diuretics		Diuretics achieve quick weight loss (fluids) They also mask other drugs making them harder to detect	<ul style="list-style-type: none"> • Dehydration • Nausea/headaches • Heart/kidney failure 	Activities with weight categories: <ul style="list-style-type: none"> • Boxing • Jockey • Drug cheats 	
Narcotic Analgesics		Narcotic analgesics increases the performers pain threshold so can mask injuries They can give a feeling of invincibility	<ul style="list-style-type: none"> • Nausea/vomiting • Anxiety/depression • Kidney/liver damage • Addiction • Risk of further injury 	Any sport that a performer is injured or: <ul style="list-style-type: none"> • Boxers • Sprinters • Footballers 	
Peptide Hormones	EPO	Erythropoietin (EPO) Can increase red blood cell production increasing O ₂ delivery	<ul style="list-style-type: none"> • Blood thickness • Blood clots • Strokes/heart attack 	Aerobic events e.g. long distance: <ul style="list-style-type: none"> • Running • Cycling 	
	HGH	Human Growth Hormone helps gain muscle mass and burns fat	<ul style="list-style-type: none"> • Arthritis • Heart failure • Abnormal feet/hands 	Strength events: <ul style="list-style-type: none"> • Weightlifting • Sprinting 	
Stimulants		Stimulants increase alertness, reduce tiredness and increase heart rate	<ul style="list-style-type: none"> • Insomnia • Anxiety/aggression • Irregular heart rate 	Alert and aggressive sports: <ul style="list-style-type: none"> • Rugby • Boxing 	
Blood Doping		Blood doping is when blood is put into a performers body prior to an event (more red blood cells = more O ₂)	<ul style="list-style-type: none"> • Infection • Blood clots • Stroke • HIV/hepatitis 	Aerobic events e.g. long distance: <ul style="list-style-type: none"> • Running • Cycling 	