# Introduction

Anabolic steroids are synthetic derivatives of testosterone used to enhance muscle growth, strength, and performance. While they offer significant benefits, they also carry risks and must be used responsibly. This guide provides detailed information about the different categories of anabolic steroids, their mechanisms, side effects, and how they are used in bodybuilding.

# Scientific Groupings of Anabolic Steroids

## Aromatizing Compounds

These compounds convert to estrogen through the aromatase enzyme. Managing estrogen levels is crucial to prevent side effects like gynecomastia and water retention. Examples: Testosterone, Dianabol.

## Non-Aromatizing Compounds

Non-aromatizing compounds don’t convert into estrogen, making them ideal for cutting cycles or users who want to avoid estrogen-related side effects. Examples: Trenbolone, Anavar.

## DHT-Derived Compounds

DHT-based steroids are derived from dihydrotestosterone and do not aromatize, but they can increase androgenic side effects like hair loss and acne. Examples: Winstrol, Masteron.

## Progestogenic Activity

Compounds with progestogenic activity can mimic progesterone, potentially causing side effects like gynecomastia even without aromatization. Examples: Trenbolone, Deca-Durabolin.

## 17-Alpha Alkylated Compounds

These oral steroids are hepatotoxic because of their modification to survive liver metabolism. Limiting usage is important to avoid liver damage. Examples: Anadrol, Dianabol.

## Anabolic to Androgenic Ratio

The anabolic-to-androgenic ratio helps users understand how much a compound promotes muscle growth versus androgenic side effects. Examples: Anavar (high anabolic, low androgenic), Trenbolone (high androgenic).

## Duration of Action (Short- vs. Long-Esters)

The ester attached to a steroid determines its release speed. Short esters require more frequent injections, while long esters have a slower release. Examples: Testosterone Propionate (short), Testosterone Enanthate (long).

## Selective Androgen Receptor Modulators (SARMs)

SARMs offer a selective approach to muscle growth with fewer side effects than steroids, but are less potent. Examples: Ostarine, Ligandrol.

## Peptides and Growth Hormones

These compounds focus more on recovery, fat loss, and anti-aging than on direct muscle growth. Examples: HGH, IGF-1.

# Detailed Compound Information

### Clenbuterol (Cutting)

**Form:** Oral

**Half life:** 36-48 hours

**Aromatization:** No

**Dht conversion:** No

**Typical dosage:** 20-40 mcg per day

**Side effects:** Tachycardia, Insomnia, Muscle cramps

**Water retention:** No

**Liver toxicity:** No

**Best use:** Fat loss during cutting

### Equipoise (Boldenone Undecylenate)

**Form:** Injectable

**Half life:** 14 days

**Aromatization:** Mild

**Dht conversion:** No

**Typical dosage:** 300-600 mg per week

**Side effects:** Increased appetite, Acne, Anxiety

**Water retention:** Moderate

**Liver toxicity:** No

**Best use:** Lean bulking

### HGH Fragments (176-191)

**Form:** Injectable

**Half life:** 30 minutes

**Aromatization:** No

**Dht conversion:** No

**Typical dosage:** 250-500 mcg per day

**Side effects:** Water retention, Joint pain

**Water retention:** Moderate

**Liver toxicity:** No

**Best use:** Fat loss, muscle preservation

### BPC-157 (Recovery Peptide)

**Form:** Injectable

**Half life:** 4-6 hours

**Aromatization:** No

**Dht conversion:** No

**Typical dosage:** 200-300 mcg per day

**Side effects:** None reported

**Water retention:** No

**Liver toxicity:** No

**Best use:** Tissue repair, Recovery

### Arimidex (Aromatase Inhibitor)

**Form:** Oral

**Half life:** 46 hours

**Aromatization:** N/A (prevents aromatization)

**Dht conversion:** No

**Typical dosage:** 0.5-1 mg every other day

**Side effects:** Joint pain, Fatigue, Headaches

**Water retention:** No

**Liver toxicity:** No

**Best use:** Estrogen control during cycles

### Cabergoline (Prolactin Inhibitor)

**Form:** Oral

**Half life:** 63-69 hours

**Aromatization:** N/A (prevents prolactin-related side effects)

**Dht conversion:** No

**Typical dosage:** 0.25-0.5 mg twice per week

**Side effects:** Nausea, Dizziness, Fatigue

**Water retention:** No

**Liver toxicity:** No

**Best use:** Prevents prolactin-related side effects in cycles involving progestogenic compounds

# Compound Comparison Table

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Compound | Aromatization | DHT Conversion | Typical Dosage | Liver Toxicity | Anabolic/Androgenic Ratio | Half-Life | Tmax | Dosage Scheduling |
| Testosterone | Yes | Yes | 250-500 mg/week | No | 100/100 | 5-7 days | 24-48 hours | Weekly (Injectable) |
| Trenbolone | No | No | 50-100 mg EOD | No | 500/500 | 2-3 days | 30 minutes | Every other day (Injectable) |
| Anavar | No | Yes | 20-50 mg/day | Mild | 300/24 | 9 hours | 1 hour | Daily (Oral) |
| Clenbuterol | No | No | 20-40 mcg/day | No | N/A | 36-48 hours | 2 hours | Daily (Oral) |
| Equipoise | Mild | No | 300-600 mg/week | No | 100/50 | 14 days | 24-48 hours | Weekly (Injectable) |
| Winstrol | No | Yes | 25-50 mg/day | Yes (Oral) | 320/30 | 9 hours (Oral) | 1-2 hours | Daily (Oral) |