**CANNABIS 101** 

## WHAT IS CANNABIS FLOWER AND WHERE DOES IT COME FROM?



At first glance, dried cannabis flower does not really look like the flowers you would typically buy from the florist such as roses, tulips, or daisies. This has to do with the fact that the cannabis you consume is actually made-up of many tiny little flowers all densely clustered together into what is commonly known as a "bud". Multiple buds will exist on

the same stem of a cannabis plant, forming what is known as the cola  $^{1}$ .

Like Lavender, Cannabis flower is made up of many tiny flowers that are all clustered together to form what is known as a "bud". Each individual flower has two very fine hairs sticking out of it. When cannabis is ready to be picked, the colour of the hairs will change from white to reddish brown<sup>1,2</sup>.

DID YOU KNOW? Cannabis plants produce both male and female flowers, with male plants producing only male flowers and female plants producing only female flowers<sup>1</sup>. Unfortunately, male flowers do not produce high levels of cannabinoids like THC<sup>1</sup> which is why Aphria only uses female plants to grow its medical cannabis.

What Are the Different Dried Flower Formats?

Aphria dried cannabis flower is available in two formats: whole flower or pre-milled. Whole flower products will need to be ground into a fine powder before use. Alternatively, pre-milled flower is ready for immediate use.

Regardless of which option you choose, both products have undergone the same post-harvest quality assurance processes by drying the flower to an internal moisture content of at least 15% to prevent molding and by allowing the flavour profile to ripen through a process known as curing.

Aphria also irradiates its cannabis. We use irradiation to ensure that the microbial count of our finished goods leaving the facility is as low as possible, as well as acceptable for release.

DID YOU KNOW? Irradiation has over 50 years of proven use in the production of medicines and foods. It is far superior to other alternatives such as the application of pesticides and fungicides or the use of fumigation, chemical treatment or damaging steam.

## Understand The Chemistry of Dried Flower

n addition to THC and CBD, dried flower products contain small amounts of other cannabinoids including cannabinol (CBN), cannabigerol (CBG) and cannabichromene (CBC) and possess a unique terpene profile  $^{3,4}$ . Although present in smaller amounts, these chemicals are believed to contribute to the individual effects patients may feel between strains by "fine tuning" effects felt from THC and CBD through what is known as "entourage effects"  $^{5,6}$ .

Compared to ingestible oil or vape concentrate products, dried flower products have undergone much less refinement, and as a result have retained a majority of the original chemistry that is unique to each strain. For this reason, dried flower products are considered full spectrum and are a great option for those wanting to maximize potential benefits felt through entourage effects.

<section-header></section-header>	All dried flower products need to be activated through application of heat and are consumed through smoking or vaporizing. Smoking involves combusting dried cannabis at high temperatures ( $600^{\circ}-900^{\circ}C$ ), whereas vaporizing takes place at $160^{\circ}-230^{\circ}C$ <sup>7</sup> . Hence, vaporizers apply much lower levels of heat to cannabinoids and terpenes than smoking.
	Since dried flower vaporizers apply lower levels of heat to cannabis, these devices can help limit the amount of combusted product inhaled <sup>8</sup> . For this reason, Canada's Lower-Risk Cannabis Use Guidelines suggest vaporizing dried cannabis as an alternative to smoking.

DID YOU KNOW? Dried flower can be incorporated into recipes by infusing cannabis into butter or olive oil, or by steeping in hot water to make cannabis tea. You can also use the infused oils to make your own topicals. Learn how.

How Much Dried Cannabis Should Patients Initially Consume? According to Health Canada, first time users to cannabis should use a product which contains less than 10% THC

(100 mg/g) and has equal or higher levels of CBD <sup>9</sup> (i.e. balanced or CBD dominant dried flower products such as Churchill or Treasure Island).

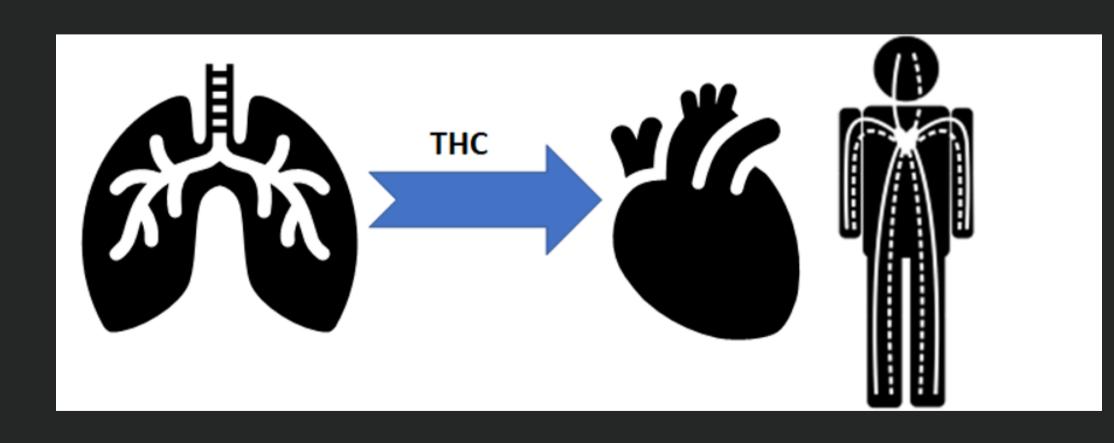
Patients can initiate titration by starting with 1-2 puffs from cannabis containing 10% or less THC, increasing by 1 inhalation every 30 minutes until desired effect is achieved  $^{7,9}$ . It can take seconds to as much as 30 minutes to feel full effects from 1 puff of cannabis, to minimize risks wait

at least 30 minutes before taking another puff  $^9$ .

## What is the Onset of Effect and Duration?

When patients inhale smoked or vaporized cannabis, the effects are felt rapidly taking seconds to minutes to feel initial effects. This is because the cannabinoids (such as THC and CBD) are absorbed quickly into the bloodstream through the lungs. Once there, the cannabinoids can travel

throughout the body to produce varying effects<sup>9</sup>.



In general, when inhaling cannabis it will take:

- Seconds to minutes to start feeling effects
- 10 to 15 minutes to feel full effects

- 6 hours for effects to disappear, although residual effects can last up to 24 hours.

The fast effects of inhaled cannabis can help patients looking to manage symptoms that have a sudden onset,

such as nausea and vomiting  $^7$  or breakthrough pain.

References ~

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