There are four basic delivery methods:

01 // Inhalation
02 // Oral-Mucosal
03 // Ingestion
04 // Topical

**INHALATION**

Inhalation is the most common way people have traditionally consumed cannabis. The onset of effects is rapid with most people feeling a “high” within minutes of inhalation. Common examples of delivery methods using inhalation are: hand pipe, bong, vaporizer, joint and hookah.

**ORAL-MUCOSAL**

The product (most commonly a tincture) is applied under the tongue or sprayed into the mouth and absorbed through the oral-mucosal lining.

**INGESTION**

Ingesting cannabis is most commonly in the form of a food or beverage item that was created using a fat or oil infused with cannabis that was then heated to ensure the cannabinoids are active when consumed. Edibles include any food or drink that contains cannabis.

**TOPICAL**

Topical cannabis products are applied and absorbed through the skin using a thick oil extract that contains active cannabinoids. The effects of the cannabinoids are generally localized and use of the product is generally not to confer intoxicating effects, but to provide localized relief from pain or inflammatory conditions (some exceptions apply).
Methods of Consumption

There are four basic delivery methods: Inhalation, Oral-Mucosal, Ingestion, and Topical. Each of these methods uses different forms of cannabis as well as hardware or tools to facilitate consumption, and will produce varying physiological effects. The physiological effects will also depend on the level of THC and CBD within a particular plant, no matter which type of method is used to consume it.

**INHALATION**

Inhalation is the most common way people have traditionally consumed cannabis with many products to choose from (e.g. dried flower, concentrates). THC and other cannabinoids are absorbed into the body through inhaling vaporized or combusted cannabis into the lungs. The onset of effects is rapid with most people feeling a “high” within minutes of inhalation. Strain genetics and personal body chemistry make this a unique process for everyone. Examples of delivery methods using inhalation are: hand pipe, bong, vaporizer, joint, and hookahs.

**ORAL-MUCOSAL**

The product (most commonly a tincture) is applied under the tongue or sprayed into the mouth and absorbed through the oral-mucosal lining. Due to its rapid onset, this is the preferred delivery method for many serious medical conditions such as epilepsy and nervous system disorders. The most common methods are sprays or tinctures.

**INGESTION**

Ingesting cannabis involves consuming a food, drink or oil item containing cannabis that has been heated to ensure that cannabinoids are active when consumed. Cannabinoids are absorbed through the digestive tract and metabolized by the liver. As the digestive system takes a while to break down the compounds, the onset of effects can take up to two hours. Factors that can affect a person's experience with edibles includes whether they have eaten recently, the amount of cannabis consumed, their comfort level with cannabis and the potency of the product ingested. While potentially safer than inhalation methods because it bypasses the respiratory system, ingesting cannabis makes it difficult to determine dosing due to its delayed effect.

The term “edibles” refers to any food or drink that contains cannabis. These products most often are infused using ingredients high in fat like butter or olive oil that enable extraction of fat-soluble cannabinoids, whether the cannabinoids can be used by the body or not. If the cannabis has not been decarboxylated (heated), it will not cause intoxicating effects. If the cannabinoids have been activated with heat, edibles will produce
Methods of Consumption

powerful, full-body intoxicating effects; however, the onset of these effects will be slower than with inhalation. In addition to food and drink, ingestible oils can also be eaten, added to food or put into capsules to ingest with similar results as other food or drink items.

TOPOCAL

Topical cannabis products are applied and absorbed through the skin using a thick oil extract that contains active cannabinoids. The effects of the cannabinoids are generally localized and use of the product is generally not to confer intoxicating effects, but to provide localized relief from pain or inflammatory conditions. Examples of products include balms, oils, rubs, personal lubricant, suppositories, salves and creams, which claim to offer relief from pain, muscle aches, soreness, and eczema.

LINKS

For more information on methods of consumption, please see the webinar on YouTube with Dr. Keith Warriner and Fatima Kamal (2018): Consumption, Risk Factors and Safety of Marijuana Edibles: https://youtu.be/cxt6DYQ2Lww

REFERENCES