

Minnesota Medical Cannabis Program
Petition to Add an Approved Delivery Method

Section A: Petitioner's Information			
Name (First, Middle, Last): [REDACTED]			
Home Address (including Apartment or Suite #): [REDACTED]			
City: [REDACTED]		State: MN	Zip Code: [REDACTED]
Telephone Number: [REDACTED]		E-mail Address: [REDACTED]	

Section B: Delivery Method You Are Requesting Be Added
Please specify and provide a brief description of the proposed delivery method. Be as precise as possible in describing the delivery method you are requesting be added. <i>Attach additional pages as needed.</i>
<p>Infused edibles are a very beneficial delivery method and one of the best ways to administer cannabinoids for patients. This delivery method would benefit the qualifying patients diagnosed with intractable pain and or muscle spasms (roughly half of the patients enrolled) the most. There are different forms of edibles; Gastrointestinal Uptake and Oral Uptake, there are also edibles that work both through the stomach and the mouth to make a hybrid of the two.</p>

B. Delivery Method You Are Requesting Be Added (Additional Page)

Gastrointestinal Uptake edibles are absorbed through the stomach and pass through the liver, these include popular snack foods like cookies, brownies and peanut butter. Even capsules, which are already involved in the medical program fit into this sub-category. When the food is eaten and then absorbed through the stomach it then allows the cannabinoids to spread out more evenly increasing the likelihood that the cannabinoids reach the area that is in need of treatment. This method takes a little longer for onset, about an hour, due to the fact that it has to reach the stomach and pass through the liver but because it takes time to digest they last longer as well, about 6 to 8 hours with after effects being able to span until one 'sleeps it off'. When the cannabinoid delta 9-THC passes through the liver it converts to delta 11-THC, a more potent compound that intensifies the affects.

Oral Uptake edibles are absorbed through the saliva in the mouth. This would be anything from gum to lollipops, even the already used tinctures and oral solutions are included in this subcategory. These methods are more useful for immediate relief but do not last as long, with their span being anywhere from 2 to 4 hours.

An example of a hybrid edible would be either a chocolate bar or a infused drink, like a tea. These are absorbed through both the stomach and mouth and can last as long as the Gastrointestinal Uptake edibles and usually start working within half an hour.

I am petitioning for the expansion of this delivery method because the beauty of cannabis is that it is a natural medicine. Nothing is more natural than eating food or drinking a beverage, it is a basic human need. Although edibles are somewhat represented in the forms of the capsules or tinctures I believe patients deserve something that is less of a hassle to them and feels more natural. The capsules could remind patients, especially the ones suffering from intractable pain, of the addictive narcotic pain pills that they had to force down that came with ill side effects before this program was even an option while some may even have difficulty swallowing pills (not to mention the capsules available are not small). As for the tinctures, it is a foreign concept to patients to drop a liquid under the tongue and let it sit there for 30 seconds, it is very likely that they may feel more comfortable with chewing gum or sucking on a lollipop.

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Section C: Anticipated Benefits from the Proposed Delivery Method

Describe the anticipated benefits from the proposed delivery method and why it is better than currently approved delivery methods. Identify patient populations that do not benefit from current delivery methods

Attach additional pages if needed.

The inclusion of infused edibles in the medical program would benefit patients through their convenience as well as their affordability, which is the number one negative of the program according to customers. Infused edibles would also be cheaper to make, saving the companies involved money.

Section D: How Current Delivery Methods Are Inadequate

Provide information regarding the extent to which the currently approved delivery methods are unable to meet the needs of patients enrolled in the medical cannabis program. *Attach additional pages if needed.*

This section will be shorter than the others because while the current products are not inadequate and do work for patients they are inaccessible to some because of the steep price point. It has been stated that the monthly re-fills can range from \$300 to \$1000 that could be as much as \$12,000 a year, this amount is too high. As a Pharmacy Tech I have seen people at checkout with \$800 or \$900 carts. This is very exclusive to only those with disposable incomes. Even for day to day medication, a prefilled vaporizer will last only a day or two on average and costs between \$40 to \$60, if infused edibles are approved a cookie can last a day or even two as there may be multiple doses in just one and would usually only cost \$10. Also, I am a firm believer that the patients should have access to more options which may work better for them as each body responds differently from medication to medication and how that medication is administered.

C. Anticipated Benefits from the Proposed Delivery Method (Additional Page)

I will first touch on my theory of how they would make medicating more convenient for patients. As stated in section B, eating a cookie or sucking a lollipop would be easier and come more naturally than dropping an amount of tincture under the tongue. Also this method has the advantage of being discreet and allowing patients, who may already feel vulnerable due to their illness, of administering their medicine in an everyday manner. This advantage would be best used in public settings like a coffee shop, in a shopping center or for example; if a parent is attending their child's school event. In any of these places vaping may not be allowed and if so may be frowned upon by accompanying bystanders sharing the same space. While dosing a tincture under the tongue may get strange looks and even getting out a bottle of capsules and tossing one back may make someone feel self-conscious.

According to the Associated Press both Minnesota Medical Solutions and Leafline Labs have seen major losses to the tune of about \$11M in the two years the program has been around. More affordable products like infused edibles could turn this around by allowing more patients an affordable way to medicate while also saving the companies more manufacturing costs by using less resources. In 2014,(coincidentally when MN established their medical program and marking two years of Colorado's legalized recreational program) the medical effects of edibles were still highly sought, as during the year there were nearly 2 million infused edible products bought in the medical market.

I am not all that familiar with how the companies make their formulations but with their high price points it tells me that they are not very cost effective to make either. The infusion of edible foods is a basic cooking method that requires nothing more than the base plant material, a stove, some cookware, and a fat-soluble base like butter. This money saving method could turn out a very much needed affordable product that would allow more patients to reasonably purchase. Although, there are different ways to derive different compounds depending on what you do in preparation to infuse the cannabinoids; THCA (the acidic form of delta 9-THC), THC, and CBN (cannabinol) are some of the different cannabinoids that can be utilized through infused edibles. As THC is the most common some patients need CBD; THCA and CBN both mimic CBD in their own ways and are a more cost efficient substitute.

Pain patients along with those suffering from muscle spasms could benefit from a product that could provide up to a days worth of relief by helping release tension in the body. Patients suffering from Crohn's disease, an already approved qualifying condition, would also benefit from edibles as it affects the Gastrointestinal tract and that is exactly where the gastrointestinal uptake edibles distribute the cannabinoids.



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Section E (optional): Scientific Evidence of Support for the Delivery Method

It will strengthen your petition to include evidence generally accepted by the medical community and other experts that addresses the effectiveness of the proposed medical cannabis delivery method and discusses its potential risks and benefits. This includes but is not limited to full text, peer-reviewed published journals or other completed medical studies. Please attach complete copies of any article or reference, not abstracts.

I have attached relevant articles. (check box if you have attached scientific articles or studies)

Section F (optional): Letters in Support

Attach letters of support from persons knowledgeable about the use of the delivery method with medical cannabis.

I have attached letters of support. (check box if you have attached letters of support)

Section I: Acknowledgement and Signature

Please Note: Any individually identifiable health information relating to any past, present, or future health condition or health care contained in this petition is classified as a health record under Minnesota Statutes §144.291, and is not subject to public disclosure.

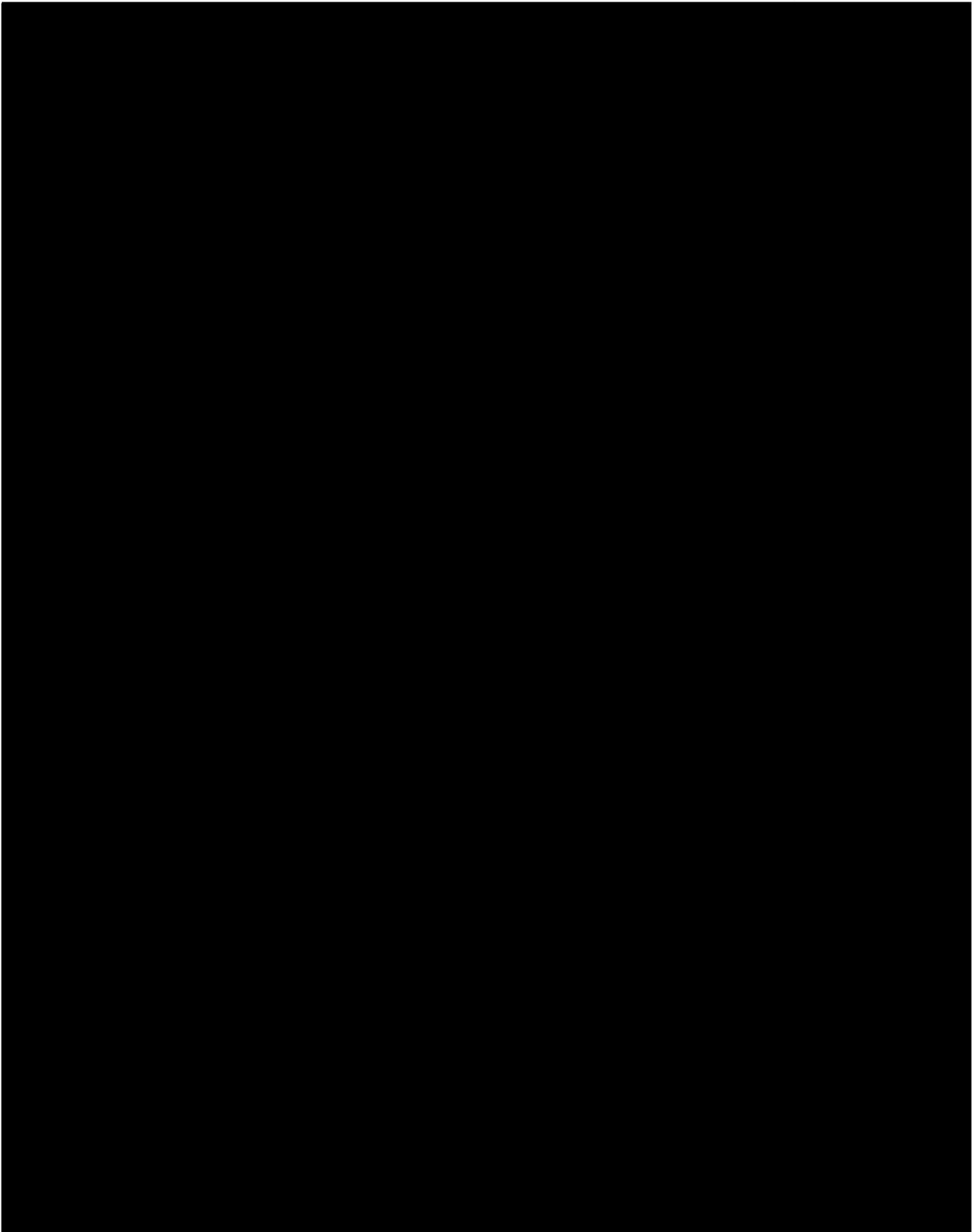
I certify that the information provided in this petition is true and accurate to the best of my knowledge.

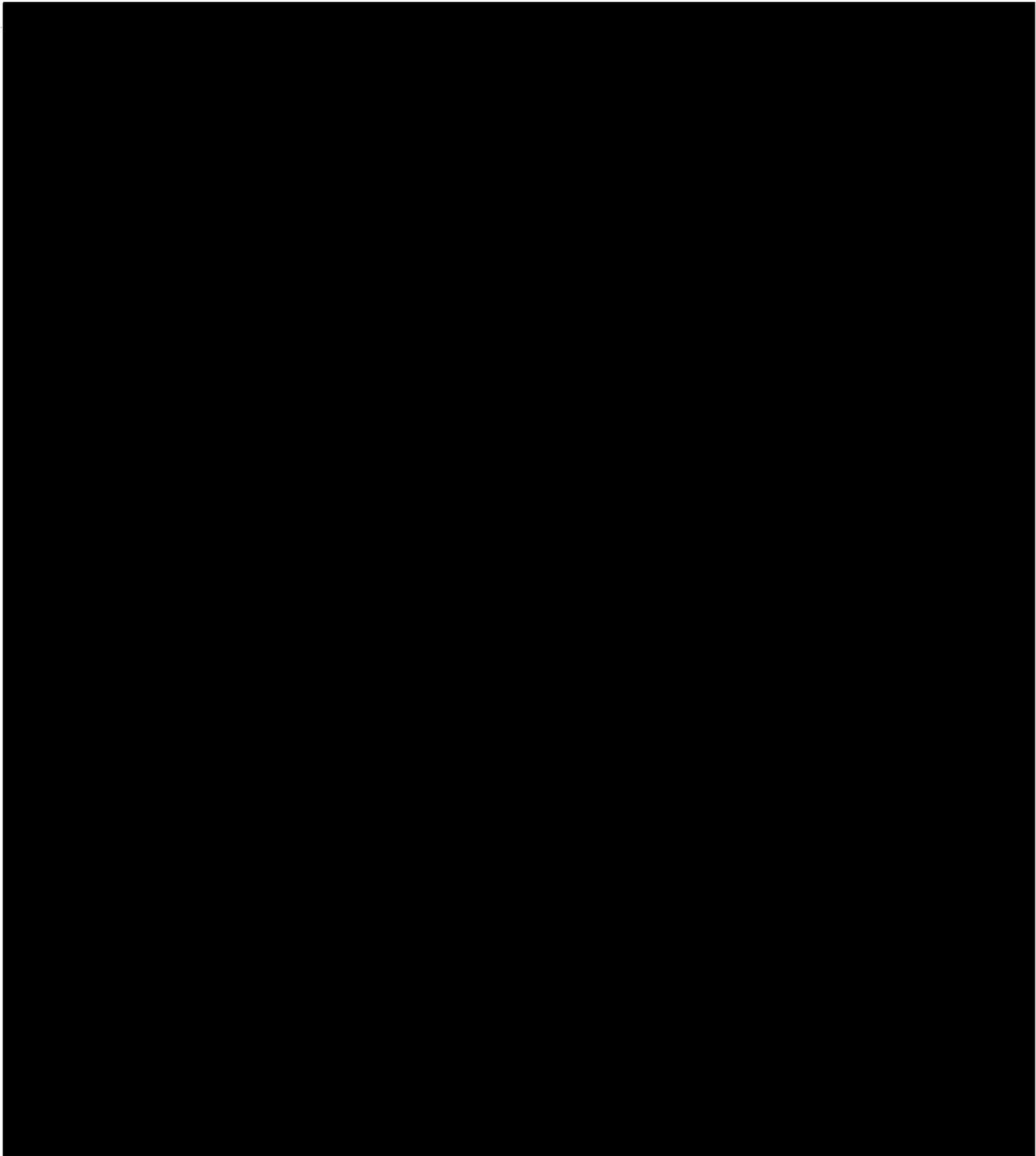
[Redacted Signature]

SIGNATURE

07/29/17

DATE (mm/dd/yyyy)





[Redacted text]