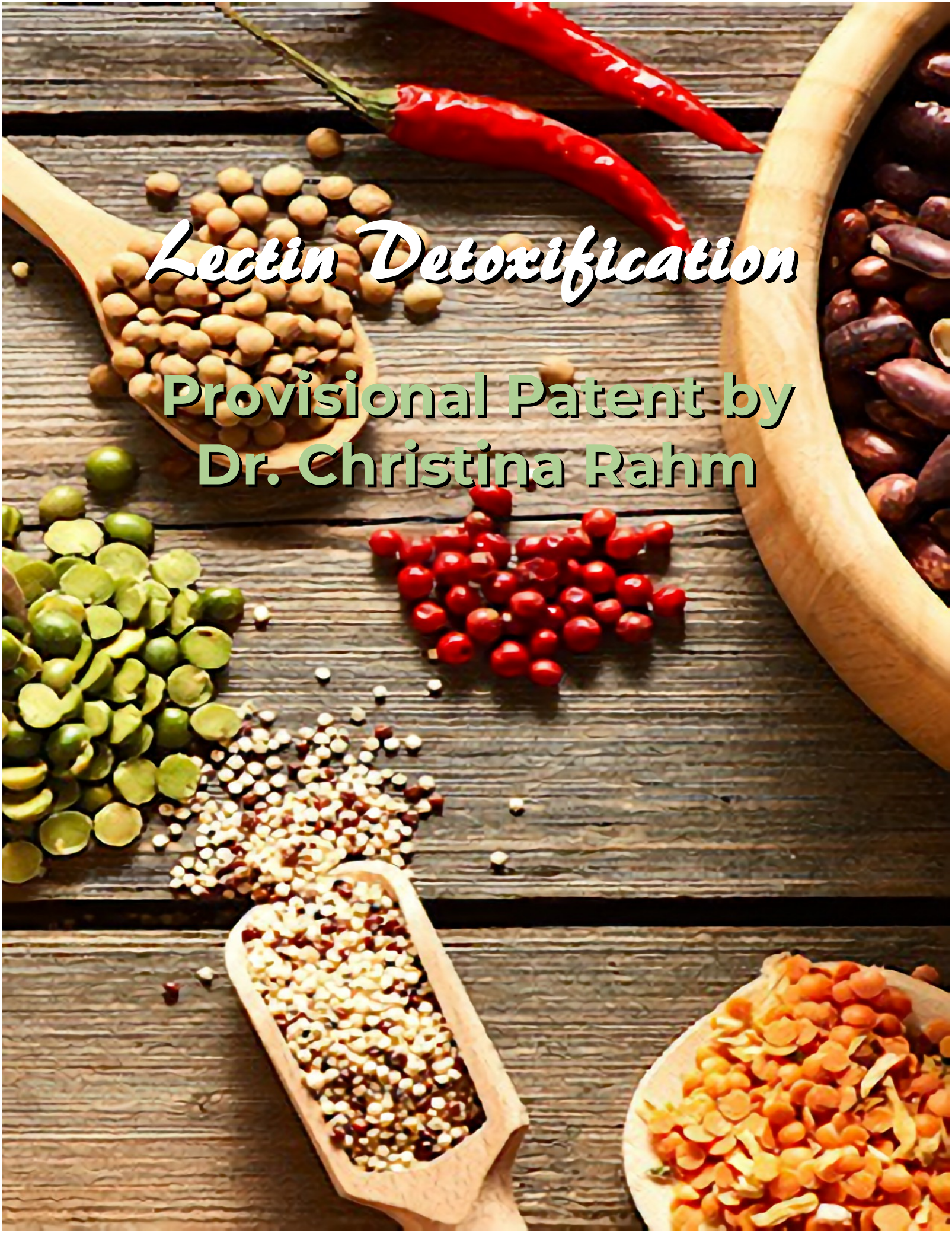
Lectin Detoxification
Provisional Patent by
Dr. Christina Rahm

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What are Patents

Review

Last week, multiple presentations on patents were conducted, and this is a brief review of the topic covered.

Definition of Patent

Patents protect the intellectual property of companies to help their profitability. However, patents also serve as bragging rights for companies demonstrating their innovativeness.

Types of Patents

There are 3 types of Patents:

1. **Design Patents** – In the United States, a ***design patent*** is a form of legal protection granted to the ornamental design of an article of manufacture. Design patents are a, new type of industrial design right. Ornamental designs of jewellery, furniture, beverage containers, and computer icons are examples of objects that are covered by design patents.
2. **Plant Patents** – Available to anyone who produces, discovers, and invents a new kind of plant capable of reproduction.
3. **Utility Patents –** People who invent a new and useful process, an article of manufacture, a machine, or a composition of matter ***Utility patents are the most common type of patent, with more than 90% of patents*** issued by the U.S. Government belonging to this category.

Patent Detoxifying Lectins- provisional

Understanding The Role of Lectins in Health and Nutrition

In recent years, the subject of lectins has gained momentum among health enthusiasts nutritionists, and researchers alike. Lectins a type of protein found in many foods, particularly in legumes, grains, and some vegetables, have been studied for their potential health challenges.

However, amidst concerns, ***Dr. Christina Rahm***, is researching the possibility of detoxifying lectins. This presentation will help explain, the significance of detoxifying lectins,, and the emerging innovations in **lectin detoxification**.

What Are Lectins?

Lectins are carbohydrate-binding proteins that can be found in a variety of foods, especially those that are plant-based. While they can play a role in plant defense mechanisms, in humans, they can cause problems.

Some people can experience digestive issues as a result of consuming food with lectins,, leading to inflammation and other health challenges.

Common sources of lectins include:


Kidney beans - especially if under-cooked

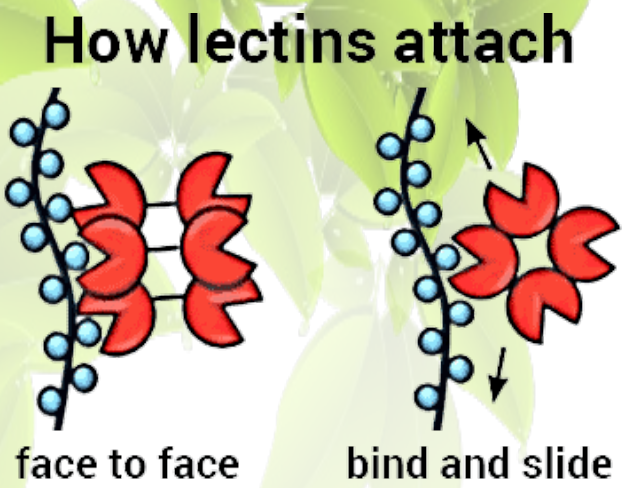

Soybeans - more specifically if not fermented


Peanuts - unlike other seeds/nuts heating does not remove lectin


Lentils **-** Chickpeas, and Peas - cooking seems to reduce lectin content


Whole - Grains -such as whole wheat


Nightshades **-** includes, tomatoes, potatoes, peppers, eggplant, nicotine



*Glyca-binding proteins (GBPs) are a category of proteins that bind specifically to certain sugar molecules. The **"glyca"** is the same prefix you see in the word* **glycation**. *That describes what happens after a protein or fat binds with a sugar molecule*

When it comes to human health, most of the interest focuses on the potential problems associated with lectins, especially for individuals with sensitive digestive systems. The health concerns linked to lectins have sparked research aimed at uncovering strategies to minimize their adverse effects while enhancing the nutritional benefits of lectin-rich foods.

The Need for Detoxifying Lectins

It seems that the conversation around lectins is often focused on their negative implications, the emerging concept of detoxifying **lectins**, has opened up new avenues for discussion. Detoxifying **lectins**, refer to the approaches or methods that can neutralize or diminish the potentially harmful effects of lectins without removing beneficial nutrients from food sources.

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Innovative techniques may involve:

- Cooking: High heat can often deactivate many types of lectins, making foods easier to digest.
- Fermentation: This process can break down lectins and other anti-nutrients, enhancing nutrient availability.
- Sprouting: Germinating seeds can considerably lower their lectin content.

The Role of Lectin Patents

As we begin to understand Lectins, research and innovation lead to breakthroughs in detoxifying lectins. **Dr. Christina Rahm** has filed a patent aimed at developing new methods and products focused on detoxifying the harmful effects associated with lectins.

This patent may involve novel cooking techniques, food processing methods, or supplements designed to mitigate the adverse effects of lectins while enhancing the bioavailability of nutrients. This can be particularly beneficial for people with specific health conditions or dietary restrictions that make traditional lectin containing foods difficult to digest.

Expert Insight: Dr. Christina Rahm

Dr. Christina Rahm has been at the forefront of research pertaining to detoxifying **lectins**. Her work highlights the significance of not vilifying lectins entirely but rather recognizing their potential risks and benefits. ***Dr. Rahm's*** approach emphasizes that it is possible to enjoy a diet that includes **l**ectin-containing foods while employing strategies to minimize their negative impacts.

In her research, ***Dr. Rahm*** advocates for an individualized approach to nutrition, understanding that everyone's body reacts differently to various foods.

Thus, through education and awareness, individuals can make informed choices when it comes to incorporating or detoxifying lectin-rich foods in their diet.

Leptin Detoxification Patent Details

The **lectin detoxifying** invention introduces a groundbreaking method for the extraction and enhancement of lectins, (***crucial biomolecules recognized for their diverse biological activities***), through the employment of an aqueous magnetic two-step solution combined with fractionation techniques.

This innovative approach not only facilitates the isolation, purification, and characterization of lectins derived from a variety of sources — including seeds, roots, bark, leaves, tubers, plants, fruits, vegetables, beans, nuts, and oils — but also focuses on the task of detoxifying the negative characteristics associated with these compounds.

By carefully addressing the potential harmful effects, the method protects the ***nutritional benefits of lectins, such as***

- anti-fungal, anti-viral, and antibacterial properties
- while simultaneously enhancing their beneficial roles, which include insecticidal action, analgesic effects, anti-human immunodeficiency virus activity, and antitumor capabilities.

This process not only safeguards the inherent positive attributes of lectins but also ensures that their health-promoting qualities are preserved and possibly amplified, paving the way for new applications in nutrition and medicine

Slide from Root U Patent Presentation

Lectin Detoxification Method

Background of the Invention:

Lectins: Carbohydrate Binding Proteins

- Lectins are carbohydrate binding proteins that can attach carbohydrates with significant specificity.
- They bind specifically and reversibly to different types of glycoproteins or carbohydrates.
- Lectins are found in plants, including seeds, leaves, bark, roots, tubers, and fruits.

Lectins in Foods

- Lectins are present in many foods, including grains and legumes, which are beneficial for humans but have an anti-nutritional characteristic due to their overabundance.
- This is likely due to lectins impairing the integrity of the intestinal epithelium, inhibiting optimum absorption and utilization of nutrients.
- Lectin-containing foods are often cooked or processed to reduce their anti-nutritional characteristics.

Lectins in Food Safety

- Food safety research has been conducted to determine the digestibility of lectins, especially regarding the consumption of high levels of unprocessed or undercooked beans, seeds, plants, roots, fruits, or vegetables.

Lectin Separation and Purification

- An aqueous magnetic assisted two-phase system can separate lectins from plants, roots, fruits, vegetables, oils, and seeds.
- This method can be used for the extraction and purification of proteins and other biomolecules from plants, seeds, fruits, vegetables, roots, and oils.

Filed Inventorship and Patent Authored Portfolio

- Environmental Filtration System
- Skin Coating Protective Line
- Lectin Detoxification Method
- Biochemical Composition and Method for Support of Cognitive Function
- Cold Press Nano-Emulsion Formula and Method for Preparation of Nutritional Supplements
- Alcohol Metabolism Acceleration Composition
- Tryptophan Metabolic Stimulation Compositions
- Permeable and Semi-Permeable Substrate and Substance Clothing/ Non-Clothing
- Extractives of Silicate Production Method
- Water Soluble Electrolyzed Silicon Dioxide Formulation Solvolyzed Clinoptilolite Fragments, Pharmaceutical, and Environmental Products Based Thereon

As we continue to explore nutrition and health, the information about lectins is far from black and white. While lectins can pose health challenges for many,

advancements in understanding and technology can pave the way for **effective detoxifying lectins.**

A patent aimed at **detoxifying lectins** illustrates a commitment to innovation, allowing us to love food with lectins while minimizing their risks.

Optimizing our health, while learning from experts like ***Dr. Christina Rahm*** can provide vital insights into how we can incorporate these foods thoughtfully into our diets — finding the perfect balance between health, nutrition, and well-being.

Patent FAQ

Q. How long is the duration of a standard patent?

A. *A standard patent typically shines for 20 years from the filing date, giving inventors ample time to harness their creativity and secure their place in innovation history.*

Q How long does a provisional patent last before it needs to be converted?

A *Think of a provisional patent as a temporary VIP pass; it lasts for 12 months. During this time, inventors can prepare to convert it into a full patent*

Q. How long does it take to get a patent granted?

A. *On average, the granting process can take anywhere from 1 to 3 years.*

Q. What is the difference between a provisional patent and a full patent?

A. *Picture a provisional patent as a rough draft. It protects your invention for a year with fewer formalities, while a full patent is the final version, complete with all the legal protection and security in place*

Q. Are there maintenance fees for keeping a patent active, and how often do they need to be paid?

A. *Yes, patents hold their value but demand some upkeep! Maintenance fees are typically due at 3, 7, and 11 years after the patent grant, ensuring that your invention stays protected.*

Q. What is the ratio between men and women seeking and are granted patents?

A. Among filings that include women, fewer than 8 percent of patents list women as the primary inventor

Medical Disclaimer

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