

ChickP Protein successfully patents plant-based protein solution

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ChickP Protein (ChickP) has announced that it has successfully patented its plant-based protein solution in Israel. This milestone comes after an enduring journey of intensive research and development that began in 2015. Growthwell Group, a local investor in ChickP, is helping the company with its patent application in Singapore.



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"Our successful patent application in Israel has been five years in the making," said Ron Klein, CEO of ChickP. "We stand on the shoulders of researchers and food technologists, without whom this feat would not have been possible. We are excited to see how our partnership with Growthwell Group can take our market reach to the next level."

The 90% chickpea isolate is developed by the faculty of Agriculture, Food and Environment of the Hebrew University of Jerusalem. Using state-of-the-art, patent-pending technology, the faculty is able to extract up to 90% pure plant protein out of the chickpea seed. As it contains all essential amino acids, the isolate is considered a complete protein. The isolate comes in powder form, making it an easy ingredient for food manufacturers to incorporate into their recipes.

Taste: As they boast an inherent bitter or off flavour, most plant-based proteins require the addition of sugar, artificial flavouring or other masking agents to cover the taste. ChickP's proteins however have a neutral flavour, and hence do not require any flavouring additive. This allows food manufacturers to achieve a clean label.

Texture and functionality: Many plant-based proteins have a sandy or chalky texture which makes for an unpleasant mouthfeel. ChickP's proteins, however, have a smooth texture and strong emulsion stability as well as high solubility and smooth viscosity.

Allergen-free: Many of the market's known plant-based products are allergenic, as they are made with milk, soy, tree nuts or peanuts, which are classified under the Big 8 Food Allergens list. This means that people living with these allergens are unable to incorporate the plant-based products into their diets. As chickpea allergies are exceedingly rare, the 90% chickpea isolate is considered to be free of allergen.

In 2020, ChickP began the commercial production of its 90% chickpea isolate. The pilot production saw a yield of 50 tonnes. By 2021, ChickP is set to augment its production capabilities, manufacturing over 1,000 tonnes of the isolate. This expansion will benefit even more food manufacturers who are keen on strengthening their portfolios of sustainable plant-based meats.

Growthwell, a leading manufacturer of plant-based alternatives for meat and seafood for the South East Asian market since 1989, is a significant shareholder of ChickP. It plans to open a state-of-the-art manufacturing plant in Singapore by 2021 Q2. The facility will have the latest food technology applications, high moisture extrusion (HME) capabilities and a fully automatic manufacturing production line to scale production and cater to the strong demand for plant-based meat and seafood alternatives in the region.

"The pandemic has put a crimp in our plans to launch the manufacturing plant this year," says Justin Chou, second-generation leader and Executive Director of Growthwell Group. "But henceforth, it is full steam ahead. We are confident that the 90% chickpea isolate is the next frontier in plant-based meat. We are excited about supporting ChickP in its R&D journey as well as bringing alternative meat products made with chickpea proteins to the global stage."

One innovative application of ChickP's protein is in seafood and meat alternative products, through Texturised Vegetable Protein (TVP) and HME. Chickpea-based TVP/HME has clean label qualities and the potential to be a highly adaptable superfood with its several nutritional characteristics -- high protein, high fibre, low carb and low sodium. With Chickpea-based TVP/HME, Growthwell is in its final round of researching and developing a chickpea protein-based seafood alternative collection -- ChickP Squid, ChickP Crab Patty, and ChickP Shrimp -- which will be free of allergens, gluten, lactose, and hormones, making it one of the safest proteins available for consumption.

With an established supply network in Asia Pacific, Growthwell is in a unique position to export these products to more than 10 different countries such as US, Spain, Indonesia, Malaysia and Australia.