

'Anti-ageing' snacks bid to improve health among elderly

Ailín Quinlan

An innovative research project into developing anti-ageing health bars or beverages — from peas, pumpkins, or rice — for the elderly is underway at Cork Institute of Technology.

Working in collaboration with Teagasc and the Kerry Group, scientists at CIT's newly launched NutRI research group are working

on the project. The ingredients have the potential to promote healthy ageing and contribute to better bone health and improved muscle mass.

In a separate project and in collaboration with Kerry Group, NutRI scientists are investigating the health-promoting potential of blends of certain vegetables and fruits such as carrots and apples, for adults of all ages.

"We are looking at using plant proteins to come up with blends to promote healthy ageing, from vegetables like peas and pumpkins as well as rice," said Fiona O'Halloran, lecturer in the Department of Biological Sciences at CIT and a NutRI team leader in food innovation.

The next phase of this research, she said, involves the formulation of healthy

snacks using these ingredients. They will be targeted at older adults and possibly be in the form of a bar or beverage. "Our collaborators in the project are providing us with the main ingredients, and we research their high-protein potential," said Ms O'Halloran.

"We will be particularly looking at combinations or blends which would contribute to bone health and

improved muscle mass, as people age. There is a lot of research that says having the correct proteins in your diet can improve muscle mass, for example."

The research and innovation group was officially launched this month by senator Jerry Buttimer.

NutRI, a multidisciplinary research group comprised of nutrition scientists, food scientists, microbiologists,

biochemists and biomedical scientists, was established to facilitate knowledge exchange and collaboration in gaining a deeper understanding of the role of food and nutrition in human health.

NutRI's expertise is in the areas of food bioactives, new product development, food safety, food-derived antimicrobials, healthy ageing, intervention trials, and

nutrition surveillance. It is primarily focused on three key research areas: Food innovation, food microbiology, and public health nutrition.

Its mission is to address a number of the UN Sustainable Development Goals, including no poverty, zero hunger, and good health and wellbeing, by delivering innovative solutions to global challenges through direct engagement with industry

and society. NutRI's research in food safety, nutrition, and health, will also help develop the curricula in undergraduate courses.

The group is funded by Enterprise Ireland, Department of Agriculture, Food, and the Marine, Health Research Board, Irish Research Council, Science Foundation Ireland, CIT Risam Scholarships, and the Marine Institute (Cullen Fellowship).

Growers promote real tree choice

Irish-grown Christmas trees are now an important part of the rural economy, and are good for the environment, writes **Ray Ryan**

One of the joys of the Christmas season in Ireland is choosing, buying and decorating a real tree for home, office or public place. It's a tradition that goes back generations and has not lessened in fast moving lifestyles and with the growth of digital technology. For there is nothing quite like the smell of a real Christmas tree in the home.

Over 80 growers have now harvested their seasonal crop, which is said to be of excellent quality and with a good colour as a result of favourable growing conditions.

The Irish Christmas Tree Growers Association represents those who are committed to producing a variety of species to the highest standards and in an environmentally sustainable and professional manner.

Production has matured over the years and the product offered is now considered to be one of the best in Europe.

This year, an average tree is expected to cost between €35 and €65. The non-shed Nordmann Fir and Noble Fir are the most popular.

ICGA chairman Christy Kavanagh said Ireland's maritime climate provides ideal conditions for the growing of top-quality Christmas trees. "The look, the scent and the very feel of a real tree are all part of the Christmas tradition. But growing the perfect tree requires more than planting and hoping for the best.

"When you buy a real Christmas tree, carefully grown and cultured locally, there is that extra special knowledge that you are supporting nature and the environment," he said.

Tony Johnston, Belfast, recently won the annual ICTG Christmas Tree Growing Competition, with his Nordmann Fir.

It was the first time a grower from Northern Ireland took the title. "It can take between seven to 10 years before an Irish-grown Christmas tree is in peak condition and ready for harvesting," he said.

Experts have calculated that during the growing period one hectare of Christmas trees produces between 70 and 105 tons of oxygen.

This year, the ICTG is again urging people to choose an Irish grown tree for the benefit of the environment by reducing

plastics and supporting the local economy.

Most growers net and palletise trees just before they are dispatched. On delivery these trees must be removed from the pallets as soon as possible. If they are left stored in pallets, they can degrade rapidly.

Pallets are for transportation and not storage. Trees should, therefore, be stored upright, preferably out of their nets and in a sheltered spot because wind can dry them out more quickly.

Retailers are urged by the ICTG to provide tree care advice to customers. The use of a stand allows the tree to be watered. Sources of heat and water such as fires and radiators should be avoided.

Non-shedding trees like the Noble Fir and the Nordmann Fir will retain their needles for weeks in the home. But they can be recycled after use at locations countrywide, creating compost for gardens and in landscape use. New trees are also continually being planted to replace those harvested.

Minister of State Andrew Doyle, recently visited Wicklow Way Tree Farm, run for over 30 years by the Kinlan family in Roundwood, Co Wicklow.

A former sheep farmer, Seamus Kinlan created the business by planting marginal land with Christmas trees as a way to diversify his farming enterprise.

His son Tony now manages the company although Seamus is still "the man on the ground" and carries out the day to day tasks in running the farm.

Together they manage their 12ha Christmas tree farm in which they are growing 40,000 Noble Fir and Nordmann fir trees.

Most of these trees are sold through retail sites to the Dublin market but they also export to France, Germany and the Netherlands.

Mr Doyle said the quality of Christmas trees produced in Ireland has increased significantly in recent years.

"This improvement is due to increased expertise being employed to manage and prepare trees for more discerning customers.

It has also been facilitated by his department's investment aid scheme for the commercial horticulture sector," he said.

Mr Doyle said the scheme assists growers who wish to



Sophie Barnes Aabo, one of the stars of this year's 'The Late Late Toy Show', switched on the Christmas tree lights in Glanmire, Co Cork. The public has again been urged to choose an Irish grown tree for the benefit of the environment by reducing plastics and supporting the local economy

Picture: Eddie O'Hare

make capital investments in specialised equipment to manage and harvest the crop.

Popular investments include the purchase of specialised tree pruners, tree netters and palletisers, which protect quality and allow for efficient transport. The closing date for receipt of applications for the 2020 scheme is January 17.

Mr Doyle said a real tree provides a better Christmas experience in the home, is more environmentally friendly and has a lower carbon

footprint than an artificial tree. "People who buy an Irish tree are supporting jobs in rural Ireland. A real tree is the natural choice."

Meanwhile, the Irish Christmas Tree Growers Association has issued care and safety advice to householders.

They urge them to cut an inch or two off the bottom of the tree's stem after purchase, stand it in a bucket of water and shake off any loose needles before

bringing it indoors.

Once inside, the tree should be placed in a special Christmas tree stand or in a bucket with a bowl which should be topped up daily with a pint of water.

A tree should be placed in the coolest part of the room, ensuring it is properly secured and away from doorways, stairs, heaters, radiators and open fires.

Householders should ensure lights on trees or used for decoration elsewhere are properly wired and comply with European

Union safety standards. Lights and other decorations should always be unplugged when people leave the house or go to bed.

Meanwhile, the Garda Air Support Unit, has been deployed to help prevent raids by criminal gangs on some of the country's remotest Christmas tree farms.

'Operation Hurdle' which was set up in 2012 after a spate of thefts, mainly in Wicklow, also involves mobile patrols and checkpoints on the ground.

Consumers and farmers: A natural partnership

Vanessa B Woods

Let's start with the facts. Farmers produce high-quality, nutritious food, which consumers require for health. We are often guilty of treating food as a commodity, because it can be more plentiful nowadays.

Nutrient-dense food contains more nutrients (protein, fibre, vitamins, minerals) than calories. If consumers don't eat the essential nutrients, health is compromised, and nobody wants that. Essential nutrients are 'essential' because we cannot make them in our bodies.

Learning from the past to shape our future

Looking back to the past to understand the present is important. Learning from the past to influence our future is equally important and perhaps something that we fail to do in our busy lives.

My mother tells me that when she was growing up, there was a ration book for tea, because it was scarce, and food was never wasted in her home. Her own mother would churn butter on the farm, made by hand after her father milked the cows. My grandparents lived until their mid-to-late 80 and they did so on a simple wholesome diet of nutritious meat, eggs, dairy and vegetables.

We are now living in an era where food choice has never been greater. We have sophisticated marketing, high-end science published in peer-reviewed journals (that doesn't always reach consumers) and agri-technology, all making farming more efficient and therefore more sustainable.

What does sustainability mean? Simply meeting the needs of today, without compromising those of tomorrow and the future.

United by food and health

We are all consumers and we are united by food. We all need and expect high-quality, nutritious food for energy, sustenance, essential nutrients, good health and indeed enjoyment—because food is part of our culture, it is embedded in our DNA.

Let's remember that without farmers there is no food, without processors there is no product for market, without retailers there is no opportunity to purchase food, and until consumers buy the food, nobody gets rewarded (including consumers).

The importance of collaboration right across the food value chain has never been greater and more engagement is required at all levels, including with and among consumers.

A natural partnership

As with all successful partnerships, relevant and effective communication is key. An inclusive partnership

will facilitate consumers in better understanding the nutrient content/ density of food choices available to them and the sustainability of Irish food, grown with care and pride by Irish farmers.

After all, Irish farmers are world-renowned for having mastered the art of efficiently converting the inedible fibre in our lush green grass, naturally washed by Irish rain, into high-quality, nutritious food for consumers.

Every consumer has a carbon footprint, every single day—we are all guilty of that.

What exactly is a carbon footprint? It is the total set of greenhouse gas emissions caused directly or indirectly by an individual, a product or an event.

Whether that's boiling the kettle, growing or cooking our food, having a shower, or wasting food.

We all have a role to play in reducing our carbon footprint, and we should also be cognisant of the fact that we are united in our desire for and entitlement to good food—sustainably produced, for good health, via a balanced diet.

Role of science in eliminating consumer confusion

More recently, the debate around food choices and their environmental impact has confused consumers.

Science, communicated simply, can eliminate confusion by presenting clear facts. For example, recent peer-reviewed science reported that the nutrient density of cow's milk was seven and 35 times greater than soy drink and oat drinks.

Although greenhouse gas emissions from cow's milk were 3.3 and 4.7 times higher than soy and oat drinks, consumers need to understand that these three beverages are not the same.

The point at which the higher carbon footprint of nutrient-dense foods like dairy and meat is offset by their higher nutritional value, is a key focus area.

It is not simply a case of saying that X is good, and Y is bad. Nothing is ever that simple. For consumers who enjoy a glass of red wine, its nutrient density was very low (similar to oat drink) and its greenhouse gas emissions were the highest of all eight beverages examined in this study, being more than twice that of cow's milk.

Continuous, effective communication between farmers and consumers will deliver a natural partnership and an awareness of and appreciation for the science is key.

Vanessa B Woods is founder and chief executive of Vanessa B Woods Communications, Ireland's first science communications consultancy



Vanessa B Woods

Farmers will have key role in European green deal

Ray Ryan

Farmers will have a key role to play in the European Green Deal but at this stage, it raises more questions among farmers than it solves.

That is the initial view of Copa-Cogeca, the umbrella body for European farmers and their co-operatives, who have indicated their readiness to deliver and

support the ambitious vision provided it is coherent and consistent.

"Nonetheless, it cannot be overlooked that thousands of farmers have taken to the streets over the past few weeks in various countries calling for coherent policies, decent income, and the end to the unfair depiction of the agricultural sector.

"These concerns must be addressed. Having a vision

for Europe on climate change is mandatory but it should be a concrete and realistic project so as to leave no one behind.

"While we could support an ambitious approach, such as the one proposed in the Green Deal, farmers and their co-operatives need to know that agriculture is an essential partner of all the landmark policies that feature in it," it said.

Copa-Cogeca said the success of the green deal will partly depend on the success and the preservation of the family farming model in Europe.

"No other sector can remove emissions from the atmosphere naturally, while at the same time being the basis of the development of a bio-based economy and guaranteeing food security," it said.

The green deal is a roadmap for making the EU's economy sustainable by turning climate and environmental challenges into opportunities across all policy areas and making the transition just and inclusive for all.

Commission president Ursula von der Leyen said everyone in Europe can be part of the change. The transition is not just about big industry and coal.

"It is an opportunity for our farmers — with our farm to fork strategy. From Lapland to Southern Italy, a whole generation of young farmers are rediscovering traditional crops and bringing new life to our countryside. The green deal will be on their side," she said, adding it will take care of Europe's natural heritage, protect biodiversity, and revive the blue economy.



THURSDAY IN
Farming

Crop robot reduces use of weedkiller by 95%

