



Organic food

It is almost an accepted fact that organic food is more expensive than conventionally produced food. Is it worth the extra cost when the benefits are taken into account? Or can consumers get a fairer deal, depending on where they buy organic produce?

The market for organic food is growing in Ireland. The Irish consumer spend on certified organic food was €66.4 million in 2006. This figure is expected to grow by 15-20% annually, according to the 2006 Bord Bia annual report. We take a look at some of the reasons why consumers choose organic food, and also the other side of the debate.

Basic principles

The organic production system avoids agrochemical inputs, such as chemical fertilizers, pesticides and herbicides. Building soil fertility is a key tenet of organic farming, where the soil is fed, rather than the plant. Crop rotation is important as plants use different nutrients from the soil. If one type of crop is continually grown this can deplete specific soil nutrients. Legumes, such as peas and beans, are an organic farmer's friend. When grown, they fix nitrogen into the soil, which many crops deplete. This all means that organic farming can be more environmentally

friendly as it protects wildlife and biodiversity, which the use of agrochemicals can harm. Organic farming standards have strict regard for standards of animal welfare with the health and well-being of the animal being paramount. EU regulation and production standards reflect these basic principles that organic food production is certified against.

Conventional farming

We must recognise that conventional farming can also operate using some of the basic principles used in organic production, such as having a high regard for animal welfare and using methods like crop rotation. The Rural Environmental Protection scheme (REPS) provides grant aid for farmers who farm according to criteria that support more environmentally friendly farming practice. It is estimated that 30% of Ireland's agricultural land is farmed under REPS. Organic farmers can also participate in REPS.

Food produced under the REPS scheme is not differentiated in the market based on the fact that environmental farming practices have been adhered to. This can mean that the good farming practice of conventional farmers is overlooked, and is somewhat invisible in the marketing of conventional food.

Organic farming gives a guarantee that certain criteria have been adhered to. Guarantees that certain standards exist are becoming more important to consumers. Bord Bia have developed a number of food quality assurance schemes. When its mark is applied, this assures the consumer that certain criteria have been observed in food production.

Production standards

Standards for organic produce sold in Europe are set out by EU regulations. Member states must abide by these regulations when developing national standards. Irish certified organic produce must adhere to the rules set out in

AT A GLANCE

Standards.

Certification.

Price.



PRICES OF ORGANIC AND NON-ORGANIC PRODUCE ¹

	Non-Organic Supermarket (€)	Organic Supermarket (€) ²	Organic Farmers' Market (€) ²
FRUIT			
Apples (per kg)	2.79	3.39 +22%	3.60 +29%
Avocado (each)	1.45	1.50 +3%	1.50 +3%
Bananas (per kg)	1.39	3.56 +156%	3.10 +123%
Lemons (each)	0.45	0.50 +11%	0.50 +11%
Oranges (per kg)	1.96	2.74 +39%	2.80 +43%
Pears (per kg)	2.47	2.99 +21%	3.65 +48%
VEGETABLES			
Broccoli (per kg)	4.32	7.98 +85%	4.60 +6%
Carrots (per kg)	1.59	1.78 +12%	2.00 +26%
Cauliflower (each)	1.49	2.49 +67%	3.00 +101%
Celery (each)	1.19	1.99 +67%	2.20 +85%
Onions (per kg)	1.78	3.21 +80%	2.60 +46%
Garlic (each)	0.52	0.50 -3%	0.60 +15%
Potatoes (per kg)	1.61	2.05 +27%	1.90 +18%
Tomatoes (cherry, per kg)	7.96	9.05 +14%	7.00 -12%
Leeks (per kg)	4.79	5.80 +21%	3.75 -22%
Cabbage (each)	1.72	1.94 +13%	1.75 +2%
Mushrooms (per kg)	4.79	8.06 +68%	7.25 +58%

Notes: ¹ Price survey carried out between 10th of March to 1 April 2008. The prices were collected at three supermarkets and a number of stalls at farmers' markets in Dublin, Cork and the midlands. ² Percentage differences are based on non-organic supermarket prices.

Ireland's standards document. Organic certification bodies will certify organic food against these defined standards (see *Organic certification*). Some may have additional voluntary regulations combined with the minimum requirements, such as the UK Soil Association's Ethical Trade certification that combines organic certification with ethical standards (see *Useful websites*).

Organic farmers must register with one organic certification body and practice farming according to set organic standards. If a farmer is changing from conventional to organic production, the farmer must adhere to organic standards for two years before the farm is given organic certification and produce can be sold as organic. The farm is also inspected at least once annually to ensure that standards are upheld.

Organic certification

Two certification bodies currently operate in Ireland, the Irish Organic Farmers and Growers Association (IOFGA) and the Organic Trust (see *Useful websites*). Certification bodies must be approved by the Department of Agriculture and are given a certification code (IOFGA IRL-OIB2-EU, Organic Trust IRL-OIB3-EU).

Symbols on food labels will indicate to the consumer that a food has been produced according to organic standards.

Symbols are not legally required, but the label should at least display the words 'certified organic' or 'organic certification' and the certifying body's code. The two Irish organic certification bodies have their own symbol.

The consumer may identify other symbols on organic foods that also indicate the food has been produced to organic standards. Organic food sold in Ireland may not be produced or certified in Ireland. There are many other certification bodies in operation throughout the world. These include the Soil Association in the UK, Agriculture Biologique (AB) in France and Eco-Cert in Belgium. Demeter certifies biodynamic produce and operates worldwide (see *Biodynamic: a different perspective on organic*). The many symbols could potentially confuse consumers. Bio-Siegel is the only symbol permitted for use on organic produce in Germany.

Some countries do not use the term organic, but use 'bio' or 'eco' instead, which refers to the same processes and standards. Imports of organic produce from non-EU countries are only permitted when production standards conform with EU criteria.

Organic production is strictly regulated, so that when a symbol is applied regulators are there to ensure standards have been adhered to (see *Can*

consumers trust the label?).

Ireland's organic sector

The Bord Bia 2006 annual report highlights that the single greatest challenge for the Irish organic sector is to increase production and develop products that meet lifestyle demands. They note that few organic farmers can presently meet the consistency and volume requirements of supermarkets and larger processors. Bord Bia suggests the consequences of this are imports of organic produce and higher retail prices. In 2006, 0.9% of Ireland's agricultural land was certified organic. The government wishes to expand organic production and aims to increase this figure to 5% by 2012. It is hoped that larger producers will convert to organic production so that Ireland can meet market demand with fewer imports. This should also lead to a reduced purchase price for the consumer.

Organic food miles

The principles of organic farming should make it a more sustainable kind of farming. But the sustainability debate relating to organic food can be taken beyond the farm. Is organic food really organic if beyond the farm gate the underlying principle of a more sustainable system is not carried through? This

Useful contacts

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Organic Unit

Department of Agriculture
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Johnstown Castle Estate
Co Wexford
1890 200 509
organics@agriculture.gov.ie
www.agriculture.gov.ie

Food Safety Authority of Ireland

Abbey Court
Lower Abbey Street
Dublin 1
Advice Line
1890 336 677
tel (01) 817 1300
fax (01) 817 1301
email info@fsai.ie
www.fsai.ie

Useful websites

International Federation
of Organic Agricultural
Movements
www.ifoam.org

Irish Organic Farmers
and Growers
Association
www.iofga.org

The Organic Trust
www.organic-trust.org

Soil Association
www.soilassociation.org

Demeter
www.demeter.net

Report by
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CAN CONSUMERS TRUST THE LABEL?

Organic produce is not always cosmetically perfect. It can look a little more rugged than conventional produce. Pesticides are not used in organic production so you may have to accept finding a few holes in your cabbage where a caterpillar has feasted or taking home a few friends from the insect world who have taken up residence in your broccoli.

Although some may argue there are identifiable differences, organic and conventionally produced food cannot be distinguished just by looking at it. The differences are not clear cut and rogue traders can exploit this. Consumers must be assured they get what they pay for.

New regulation was introduced in 2007 that gives the Department of Agriculture stronger powers of enforcement. Fraudsters face a fine

of up to €5,000 and even the possibility of a prison sentence.

The Department of Agriculture's Organic Unit employs dedicated inspectors who inspect retail outlets where organic food is sold. If consumers suspect produce being sold as organic may not be, they can report this to the Organic Unit (see *Useful contacts*).

What if there's no label? If a shop sources and sells organic produce, such as fruit and vegetables, that are not pre-packed, the retail outlet must be registered with one of Ireland's organic certification bodies. If an organic certification symbol is not displayed on the product, the consumer can ask to see the certification certificate. Retailers who sell organic food without packaging are also subject to annual inspection, just like organic farmers.



particularly relates to imported organic produce and the distance it travels. The UK Soil Association has introduced a policy that organic produce can only be air freighted if it meets their Ethical Trade standard. This addresses the social aspects of sustainability, but air freighted organic produce is still dependent on air transport, a significant contributor to environmentally unfriendly greenhouse gases. However, the UK Soil Association suggests the extent of air freighted organic food is overstated; it calculates that this represents less than 1% of all imported organic food in the UK. Air freighted organic foods are mostly fruit and vegetables, to ensure a supply is available out of season. In addition, fruit and vegetables can be transported in the cargoes of passenger flights that will fly anyway.

Organic food products

Food that has undergone a degree of processing, from organic bread to an organic ready meal, must contain at least 95% certified organic ingredients. Some ingredients, such as salt, are not given organic certification. Salt is a mineral, not a plant and cannot be organically grown. This is why some leeway is allowed.

No artificial colours, flavours or preservatives are permitted for use in organic food. However, some additives are permitted, but come from natural sources. Of the 290 additives permitted for use in the EU, 35 are

allowed in organic food.

Better for you?

Organic food labels cannot claim that organic food has a better nutritional value than non-organic food. Research has suggested that organic food can have a higher nutritional content. But other research has also suggested it does not.

Recently it emerged that a four year study at the University of Newcastle found that food from organic production can have a higher nutritional content. However, this study is yet to be peer reviewed. In 2001, the UK Soil Association produced a report reviewing 400 scientific papers on the differences between organic and non-organic food and concluded that the scientific evidence supports the fact that organic food can be of higher nutritional value. Last year, the British Nutrition Foundation (BNF) carried out a similar review and found that overall the scientific evidence does not support the notion that organic food is better nutritionally. BNF found some differences, such as higher vitamin C and lower nitrate levels in organic vegetables, but suggest this is not significant enough to have a great impact on human health.

Proponents within the organic sector would argue that research into the benefits of organic food is lacking. The BNF review does suggest that good quality research comparing the nutrient content of organic and non-organic foods is not widely conducted. The argument from the

organic lobby is that the conventional food industry has greater financial wealth to fund food research and that its research does not often focus on the benefits of organic food.

Leaving the nutritional debate aside, consumers of organic food often feel that by virtue of organic standards, organic food is better because it is 'GM free' and no pesticides, fertilizers etc. have been used in its production.

Why the price difference?

Organic farming can produce less food per acre of land because of its less intensive production practices. Labour costs are often higher than conventional production, as are animal feedstuffs. Weeding is thought to be the major additional labour cost as no herbicides are used.

Conventional farming can rely more greatly on purchased inputs, such as fertilizers, while organic production relies on natural inputs, such as farmyard manure and composting. But this does not balance the costs of production so that organic food matches conventional food prices.

Organic production is a more costly system of food production and this is then passed on to the consumer of organic food. Higher costs are justified for some consumers who are willing to pay a higher premium for certified organic produce. Bord Bia research indicates that consumers are prepared to pay 15 to 20% more for organic food,

ORGANIC PROS AND CONS

The points below are subject to debate and are presented as simplified statements. However, it is useful to illustrate both sides to show how a generalised benefit is neither simple nor clear-cut.

Benefits

- Potentially better taste and nutritional value.
- No synthetic pesticide or chemical use in production.
- No use of GM plant seed or animal feed.
- More environmentally beneficial farming – supports wildlife and biodiversity.
- No routine treatment of animals with medicines – less residues in food.
- Limited additives permitted in organic food.

Drawbacks

- Costs more to produce – higher prices for the consumer.
- Lower productivity system that requires more land to produce less food.
- Intensive organic farming is more exhaustive on land.
- Quality can deteriorate quicker than conventional produce that uses additives and preservatives.

but not above this. Our survey showed that the actual price difference can be much greater than this.

Some would also argue that conventionally produced food is too cheap and to get prices down, compromises can be made. This argument is very hard for low income consumers to accept.

Organic food is increasingly available from alternative food retailing outlets such as farmers' markets and box schemes. But only a small proportion of organic food is purchased from these outlets. The 2005 Bord Bia Organic Market Channel Study found that mainstream retail channels accounted for 85% of all retail sales of organic food. The total value of sales through independent channels was 15% (5% independent traders, 4% health food stores, 3% deli specialists and 2% through box schemes).

Our fruit and veg survey

Fruit and vegetables are often available in a number of varieties. Different varieties vary in price as some are easier to grow, others are more prolific. To try to balance things out, where possible, we looked at a number of varieties and calculated an average price for each fruit or vegetable. Our survey is of fresh produce and doesn't speak for other organic produce, such as meat, bread, eggs etc.

We compared the price of organic and conventional produce. In most cases, organic fruit and vegetables were more expensive than their non-organic equivalent. Organic cherry tomatoes and leeks at the farmers' market were cheaper than the conventional at the supermarket. But this should not be taken as a general rule of thumb, as there is a great level of variation in price from season to season.

We probably already know that organic produce is generally more expensive, but

it is also important to highlight by how much. Overall, organic fruit and vegetables were 23% more expensive at the farmers' market and 41% at the supermarket, than conventional produce.

When comparing organic with organic at the two outlets, our findings indicate that the farmers' market can provide a better deal. Supermarket prices can be lower, but the farmers market was generally cheaper to a greater degree. For example, broccoli was €3.38 cheaper per kilo at the farmers' market and leeks €2.05 (see *Prices of organic and non-organic produce*).

Box schemes

Organic box schemes will offer small, medium and large boxes filled with vegetables and/or fruit. The box will be delivered to your door. One drawback is that you will get a set range of vegetables.

But if you really don't like certain things, on request the supplier is often willing to substitute the item for another of equivalent value. The selection will vary depending on what's in season, so each delivery may also bring a few surprises. Suppliers will often guarantee a base of more staple vegetables such as potatoes, carrots, onions and garlic.

Organic box schemes are difficult to compare: what you receive and the exact amount can vary. We did a rough comparison. A mixed fruit and vegetable box can cost between €20 and €30, which will usually contain about 8 to 10 types of fruit and vegetables. We made up a quick basket from the supermarket containing non-organic onions (1kg), garlic (two bulbs), potatoes (1kg), carrots (1kg), broccoli (1 head), tomatoes (300g vine), bananas (1kg), apples (four), and oranges (four) and it cost €16.53.

There are other additional benefits to buying organic produce through alternative avenues. Produce bought through farmers markets' and box schemes is usually sold with minimal or no packaging. Organic fruit and vegetables sold at the supermarket are always sold packaged (usually in plastic, one of the most difficult materials to recycle) to differentiate them from conventional produce. Consumers will also find a greater range of organic fruit and vegetables available through farmers' markets and box schemes.

BIODYNAMIC: A DIFFERENT PERSPECTIVE ON ORGANIC

Biodynamic farming is a type of organic production developed by Rudolf Steiner, the founder of the spiritual philosophy, anthroposophy. It is a specific method of organic farming that takes a more holistic approach and sees the farm and soil as a living organism. Maintaining and preserving soil health for generations is a central part of biodynamic farming. Methods adopted can differ from organic, such as using a planting calendar that guides sowing according to patterns of the moon and stars and the use of special organic herbal and mineral preparations to aid soil fertility.

choice comment

Organic food is more costly to produce so some higher prices seem inevitable. The benefits of organic food can be debated, but overall organic production has environmental benefits. The jury is still out regarding the nutritional content, and we doubt they'll ever reach a unanimous verdict. But if organic is better, how fair is it that only those consumers with the capacity to pay can afford to make more environmentally conscious and ethical choices? More consumers may wish to make such choices, but tight budgets can restrict consumers from acting on the values they hold. This does not just relate to organic food, but also in general when making more environmentally friendly choices from buying eco-friendly washing powders to a low emissions car. Also, focusing too much on the benefits of organic food can lead consumers to doubt conventional produce. Maybe this is a basic comment but before consumers get too hung up on, say, choosing between organic or non-organic fruit and vegetables, we should first assess if we eat enough of them in the first place and if choosing organic, because of the added cost, may limit our consumption of one vital element of a balanced diet.