CBI Product Fact Sheet: Almonds in Germany

‘Practical market insights into your product’

Consumption of almonds has been increasing consistently since 2010 as consumers value their health benefits. They are increasingly using them as a snack as well as in more traditional food ingredients, including marzipan, which is especially popular in Germany. Almonds are the second most frequently consumed nuts after peanuts. While the USA remains the leading supplier of almonds to Germany, reduction in supplies from other important sources such as Spain, is providing opportunities for smaller DC suppliers such as Uzbekistan, Kyrgyzstan and Iran.

Product definition

**Prunus dulcis**, more commonly known as almond, is native to the Middle East and Western and Middle Asia. The seeds are contained within an outer hull and a hard shell, and are highly prized for their flavour and nutritional value. Almonds are either sold unshelled (in-shell) or processed, which can include shelling, dry roasting, blanching, slicing, chopping, and processing into flour, paste (marzipan) or flavourings. The majority of almonds are shelled during processing.

Almonds can be sweet or bitter, depending on the type of tree that produces them. Sweet almond is by far the most common type consumed in Germany and elsewhere. Bitter almond comes from a different variety of the same tree species. Sales of bitter almonds are popular in health food outlets in Germany, as they are thought to contain toxic properties. This is despite advisory limits on consumption placed on bitter apricot kernels, which share many properties of bitter almonds.

In addition to being a good source of protein, almonds are also a good source of vitamin E, dietary fibre and monounsaturated fat. Scientific evidence continues to mount suggesting that a regular diet of almonds is beneficial to health.

A higher proportion of almond production is used as an ingredient for other food products, as opposed to consumption in its raw form. According to market research specialists Innova Market Insights, almond is the number one nut in new product food launches and is the nut consumed most often as an ingredient in chocolate, cereals and bakery items. This is a global phenomenon but this growth is more pronounced in Europe than elsewhere in the world. Consumers are drawn to its exotic flavour, texture combinations and crunchiness.

The statistics used in this document are based on Combined Nomenclature (CN) codes. The CN classification uses Harmonised System (HS) codes to classify products.
Combined Nomenclature (CN8) almonds are included in:

- **08021110**: Fresh or dried bitter almonds in shell
- **08021190**: Fresh or dried almonds in shell (excl bitter)
- **08021210**: Fresh or dried bitter almonds, shelled
- **08021290**: Fresh or dried almonds, shelled (excl bitter)

**Product specifications**

**Quality:**

The importance of product quality, combined with the traditional nature of the trade where buyers often are reluctant to change suppliers, means that new supplying countries face a challenge to enter the market. Global climatic conditions mean that traders often need to look for new suppliers when there is a shortage, and the trade might be prepared to accept a slightly different colour, size or taste, enabling a new producer to gain a foothold, but according to importers interviewed in conjunction with this fact sheet, they will not compromise on quality standards. It is important to note that cheap "almond kernels" may in fact be derived from apricot kernels, and that this misrepresentation is an ongoing issue.

CODEX (Codex Alimentarius) and UNECE (United Nations Economic Commission for Europe) are internationally recognized standards. They are not legally binding, but German buyers would expect suppliers to conform to them if they wanted to access the market. Although there are CODEX standards for peanuts and pistachios, there are no CODEX standards for almonds. The main source for laying down quality standards for almonds is:

- UNECE, which has three separate standards that apply to almonds. Standard DDP - 18 relates to in-shell almonds; Standard DDP - 06 relates to almond kernels and Standard DDP - 21 relates to blanched almond kernels.
- See also the Guidelines for Article Numbers that include dried fruit and nuts.

The UNECE standard for in-shell almonds applies specifically to sweet almonds, which are classified into two types according to the hardness of the shell - those that can be easily cracked and those that need a hammer to be cracked. In both types, the shell must be:

- intact, although superficial damage is allowed provided the kernel is physically protected
- clean, free from foreign matter
- free from blemishes or stains, discoloration not to affect 25% of the shell’s surface
- well formed
- moisture content should not exceed 11% for the whole nut and 7% for the kernel

The UNECE standard for kernels also just applies to sweet almonds. Kernels should be:

- sufficiently dry to ensure quality
- intact, sound, sufficiently and normally developed
- clean, free from insects, damage, blemishes, mould, rancidity, abnormal moisture or foreign smell
- the condition should enable the kernels to withstand transport and handling
- moisture content should not exceed 6.5%

The UNECE standard for blanched almond kernels applies to kernels from which the skin has been removed. This does not apply to bitter blanched kernels or those which have been processed. In addition to the quality requirements of standard kernels, blanched kernels should be:

- free of adhering skin exceeding an aggregated area of 6mm in diameter
- free from gum (resinous substance) exceeding 6mm
- free from brown spots exceeding 3mm

There are three classes - "Extra" Class, "Class 1" and "Class 2". This applies to both shells and kernels, and minimum sizes are assigned to each class.
Details on sampling methods and analysis for the control of mycotoxins and aflatoxins in tree nuts can be found here.

Product should be prepared and handled in accordance with the code of hygienic practice for tree nuts (CAC/RCP 6-1972), which applies specifically to almonds and walnuts, but is generally applicable to all tree nuts.

Labelling:
Labelling of consumer packs must be in accordance with the rules and regulations applying in the EU market, including Germany. Labels cannot contain any toxic ink or glue. See EU Directive 2000/13/EC, which lays down the general rules on labelling of pre-packaged food sold on the EU market. This directive will be replaced by Regulation (EC) 1169/2011 on the provision of food information to consumers, as from 13 December 2014. The key requirements are:

- Name of the product
- List of ingredients
- Quantity of an ingredient or category of ingredients
- Net quantity (the amount of food in the container or package)
- Date of minimum durability
- Special storage instructions
- Name and address of the manufacturer or packager or EU buyer/retailer
- Place of origin or provenance of the product
- Batch number
- Instructions for use
- Certifier control number for organic products

In addition, any certification logo (if applicable) and/or retailer logo (in the case of private label products) should be on the label. Bar codes are used on all pre-packed products.

Regulation (EC) 1924/2006 covers the use of nutrition and health claims that can be made on labels. See also the CODEX guidelines on Nutrition Labelling (CAC/GL 2-1985).

More specific product information for almonds is required in addition to the requirements of the Codex Alimentarius General Standard for the Labelling of Pre-packaged Foods (CXS_001e). The name of the product should be clearly marked as follows:

- "Almond kernels" or "Almonds" and additional specifications when appropriate (assorted, mixed, without doubles, without twins, with doubles, with twins etc), the crop year is optional
- "Blanched almond kernels" or "Blanched almonds"
- in the case of shells, "In-shell almonds" or "Almonds in the shell"; shell type and name of variety is optional

Labelling is also essential to assist consumers who have allergies or intolerances. The category nuts (of which almonds is included) is one of 14 foods that require specific allergen labelling under EU law. Please refer to the links at the start of this labelling section.

Packaging:
Almond kernels and in-shell almonds must be packed in such a way so as to protect the produce properly.

The materials used inside the package must be new, clean and of a quality such as to avoid causing any external or internal damage to the produce. The use of materials, particularly of paper or stamps bearing trade specifications, is allowed, provided the printing or labelling has been done with non-toxic ink or glue.
Packages must be free of all foreign matter.

Both kernels and in-shell almonds must be presented in bags or solid containers of uniform weight intended for sale directly to the consumer, and packaged in bulk. The almond shell may be cleaned with authorised agents, provided they do not affect the quality of the kernel.

- The USA still uses the imperial measurements, so Californian almonds tend to come in imperial weight packs, such as 10lb or 20lb up to 50lb, usually in polythene bags and then boxed.
- Metric weights range from 5kg up to 50kg. Packaging types include poly-sacks, boxes and cartons, and for the very large sizes, drums and jute fabric bags. Packaging from most other countries uses the metric system.

Check the Transport Information Service website for more details of product description, quality, packaging, handling and risk factors for transport of almonds.

**Legislative requirements**

**General food law and food safety regulation:**
Regulation (EC) No 178/2002 introduces general definitions, principles, obligations, and requirements that apply to all food brought on the EU market, including Germany, in respect of food safety.

**Food hygiene:**
Regulation (EC) 852/2004 covers all aspects of the food supply chain from a hygiene perspective. Food chain actors should comply with the general hygiene requirements and requirements regarding microbiological criteria; procedures; temperature control; maintenance of the cold chain; and sampling and analysis. For actors in the food supply chain (e.g. processors, packers, distributors), the EU, including Germany, requires the application of certain rules, which are based on the HACCP (Hazard Analysis & Critical Control Points) principles regarding food hygiene.

**Food contact materials:**
General requirements for all food contact materials are laid down in Framework Regulation 1935/2004. Food contact materials, usually from packaging, must be manufactured in such a way that they cannot be a danger to human health.

**Contaminants/traces:**
The EU has set threshold limits for certain substances that could be present in food products, such as microbiological contamination, contaminants and residues of pesticides. The basic principles of EU legislation on contaminants can be found in Regulation 315/93/EEC. Maximum levels for selected contaminants in

**Considerations for action**
- Food safety is fundamentally important, and as an exporter you can gain advantage by demonstrating your appreciation of this. See the website of the German Federal Office For Food Protection and Safety.
- Check the CBI EU buyer requirements for processed fruit, vegetables and edible nuts which cover legal requirements in relation to food safety, food contact materials, contaminants and labelling.
- Check the guidance document on control of foods imported into the EU.
- Have a look at FRUCOM the European Federation of the Trade in Edible Nuts and related products. It keeps the trade up-to-date with legislative developments.
- Check the Fact Sheet on Food Contaminants by the Directorate General for Health and Consumer Protection
- More information on this subject can be found on the official EU website.
- Look at the Afghan case study on good manufacturing practices for tree nuts and
Special emphasis on ochratoxin and aflatoxins are relevant here.

**Specific regulations for nuts**
There is a specific risk for nuts in relation to contamination with aflatoxin. Regulation (EC) 1152/2009 outlines the fact that nuts exported to the EU, including Germany, have to be accompanied by a health certificate demonstrating the nuts have gone through sampling. In 2008, the Codex Alimentarius set a maximum level of 10 µg/kg total aflatoxins in ready-to-eat almonds, hazelnuts, and pistachios at a level higher than that currently in force in the EU (4 µg/kg total aflatoxins). Currently the European Commission and Member States are discussing the alignment of EU legislation for these nuts with the Codex Alimentarius decision.

**Organic legislation**
Regulation (EC) 834/2007 for Organic Food and Farming has information on organic legislative requirements.

**Traceability:**
Under EU law, which includes Germany, this refers to the ability to track any food or related substance used for consumption through all stages of production, processing and distribution.

**Import controls:**
Once cleared by customs, product can circulate freely within the EU. Imports of almonds from developing countries must come through designated Border Inspection Posts and are subject to a series of checks before being allowed to enter. The Most Favoured Nation (MFN) applied tariff for almonds in shell is 5.6%. It is 3.5% for shelled almonds.

**Non-legislative requirements**

**Other food safety schemes:**
The HACCP (Hazard Analysis & Critical Control Points) principles regarding food hygiene are a legal requirement (see above) but in practice many buyers insist on higher standards (the International Food Standard is referred to frequently in Germany). The Global Food Safety Initiative (GFSI) contains a benchmark of relevant standards.

**Organic standards:**
The German Organic Trade Association has higher standards than EU organic regulations, so certification is more challenging to new DC suppliers to this market. Organic standards are particularly important in Germany despite the fact that organic sales represent a small proportion of the almond market, but this is an important niche. To the left you can see the EU organic logo. Bio-Siegel (also left) is an organic dried fruit processing.

- See link to RASFF safety alerts. RASFF (Rapid Alert System for Food and Feed) is an important tool to enable a quick reaction when risks to public health are detected in the food chain.
- Check the websites of Codex Alimentarius and UNECE to find any relevant information on almonds.
- Check the CODEX code of practice for the prevention and reduction of aflatoxin contamination in tree nuts (CAC/RCP 59-2005), which applies to all tree nuts including almonds.
- See the European Food Safety Authority website on aflatoxins in food.
- See also this guidance document.

- Check these requirements.
- See the general principles and requirements of Food Law in Regulation (EC) 178/2002 on traceability.
- Check the EU Export Helpdesk for more information on import tariffs and import regulations.
- More specific information on importing to Germany can be found at the German Trade and Invest portal.
- Check the German organic trade association for more information on the various organic labels in Germany.
- Look on the Bio Siegel website for more information.
standard seen on some almonds in Germany. There is also a combined logo between organic and fair trade from Naturland (also pictured).

**Fair trade:**
Fair trade is also a small but important niche segment in Germany, primarily found on agricultural products, including some tree nuts. It focuses on fair labour standards and fair prices for small developing country producers. The FairWild standard is the only fair trade standard covering sourcing from wild collection. The “Fair for Life” standard is exclusively for cultivation.

**Other social and environmental standards:**
There are many international schemes available and it is a question of determining what is most suitable for your product and market, but other important initiatives regarding sustainability include ISO14001 for environmental management, ISO 31000 for risk management, ISO 26000 for social responsibility and SA8000 for social accountability.

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**Trade and Macro-Economic Statistics**

This section provides more detailed statistics of Almonds in Germany.

**Trade: Imports and Exports**

**Figure 1: Imports of almonds to Germany, 2009-2013, tonnes**

![Graph showing imports of almonds to Germany from 2009 to 2013](source: Eurostat)

**Figure 2: Leading 8 suppliers of almonds to Germany, 2009-2013, % based on tonnes**

![Graph showing leading suppliers of almonds to Germany from 2009 to 2013](source: Eurostat)

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- Check the [organic feasibility study in Central Asia](document) document in relation to nuts.
- Check the [German fair trade](website) website.
- Check the [Naturland](website) website.
- Check the [FairWild](website) website.
- Check the [fair for life](website) website.
- Look for more information on [ISO 14001](website), [ISO 31000](website) and [ISO 26000](website).
- Look for more information on [SA 8000](website).
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Analysis and Interpretation:

- Germany accounts for 27% of almond volume imports into the EU, and is the leading importer in the EU and globally.
- Total imports of almonds into Germany have increased by 20% in volume over the review period to reach almost 90,000 tonnes (€ 443 million), particularly between 2010 and 2011. However over the same period import values have more than doubled, indicating significantly increasing import prices.
- The leading 8 supplying countries shown in Figure 2 accounted for almost 97% of all almonds imports in 2013.
- USA was the leading supplier of almonds to Germany, accounting for 63% of all imports in volume. This was a slightly higher share than in 2009. The value share of USA has increased but by less than values from other sources, indicating higher prices from other importers.
- 9% of supplies came through Belgium and the Netherlands in 2013, indicating a reasonable level of indirect imports from other DC suppliers. As well as Morocco, other DC suppliers were Iran, Syria, Chile, Uzbekistan, Afghanistan, Pakistan, Kyrgyzstan, Indonesia and Burkina Faso.
- Supplies from Australia and Sweden increased, whereas those from France and Greece declined.
- Shelled almonds, where the shelling takes place in the supplying country, account for over 99% of imports, whereas in-shell almonds continue to decrease in significance.
- Bitter almonds (shelled or in-shell) account for less than 2% of volume imports.
- Exports from Germany were valued at € 80 million in 2013 (over 13,000 tonnes), almost quadrupling in value since 2009. However,

Considerations for action

- Consider exporting to Germany if you are looking at the EU market for almonds. As the leading importer and re-exporter, Germany is an important centre of the almond trade in the EU.
- If you chose an indirect route to this market via Belgium or the Netherlands, you must obtain a permit from the Federal Office for Consumer Protection and Food Safety (BVL) in order to sell the product in Germany.
- Despite the complete dominance of sweet shelled almonds, do not discount whatever opportunities may exist for almonds in-shell and bitter almonds, as you may find interesting niche possibilities.
- Note that as Germany has no production of almonds, this scale of exports indicates that Germany may...
export volumes were 48% higher than in 2009. This suggests significantly higher export prices over the period, which appear to have increased by a much greater margin than import prices.

- Interestingly exports of in-shell almonds have increased in share and account for a greater volume than in-shell imports.
- The destination of exports was also quite concentrated. The top 6 export destinations in Figure 4 accounted for 62% of all exports by volume. The leading exports were to other EU Member States.
- Other major export destinations of any significance were Spain, Sweden and Belgium.

**Production and consumption**

There is no production of almonds in Germany. Consumption figures used in Figure 5 are from the International Nut and Dried Fruit Council. These figures are a reasonably close approximation of the apparent consumption when looking at exports and imports. These two sources indicate increasing consumption levels, whereas the leading market research company Euromonitor suggests falling consumption from 2011 and consumption at a lower level. It is clear that significantly higher prices have affected the purchasing behaviour of German consumers by softening demand. This however seems to be offset by the growing appeal of almonds both as a snack and as a flavour ingredient.

**Figure 5: Consumption of almond kernels in Germany, 2009-2012, tonnes and per capita consumption estimates**

<table>
<thead>
<tr>
<th></th>
<th>2009</th>
<th>2010</th>
<th>2011</th>
<th>2012</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Consumption (tonnes)</strong></td>
<td>60,972</td>
<td>70,282</td>
<td>71,729</td>
<td>71,516</td>
</tr>
<tr>
<td><strong>Consumption /kg</strong></td>
<td>0.746</td>
<td>0.860</td>
<td>0.877</td>
<td>0.875</td>
</tr>
<tr>
<td><strong>Estimated consumption/ kg</strong>*</td>
<td>1.492</td>
<td>1.720</td>
<td>1.754</td>
<td>1.749</td>
</tr>
</tbody>
</table>

* expressed in kg per person based on UN population census
** based on estimated % of population consuming almonds

**Source:** Nuts & Dried Fruit Global Statistical Review

**Analysis and Interpretation:**

- Spain, Italy and Greece are the EU countries with significant production volumes.
- According to the International Nut & Dried Fruit Council, over one million tonnes are produced globally, an upward trend, dominated by USA, followed by Australia.
- According to Euromonitor, almonds represent 19% of the nut market in Germany (peanuts is the largest accounting for 27% of the market).
- The value of the consumer market for almonds in Germany on the basis of these volume estimates is worth around € 350 million in retail values. This also equates to a per capita consumption of approaching two kilos per annum.

**Considerations for action**

- Germany is totally dependent on imports. The dominance of USA imports suggests that traders would be interested in maintaining a broader range of suppliers to reduce dependency on USA, hence opportunities for new supplying countries.
- Consider the possibility of partnering with other importers of related products such as dried fruits.
- Check the website of the International Nut & Dried Fruit Council for more information. In Germany, interesting information can be found at the website of Waren-Verein, which represents the interests of wholesalers in nuts. You may even be a more important transit country for almonds than Belgium or the Netherlands. Take note of this if you are also considering export to other EU countries.
• Germany is the second largest global consumer of almonds (after USA). On a per capita basis, Germany is the fifth highest after Spain, Australia, Tunisia and Korea.

• Consumption of almonds increased at a lower rate in Germany than other growth markets such as Russia and China.

• The growth of snacking is another important reason why consumers are eating more nuts in general, but almond sales have benefited from this trend less than other nuts. Consumption of almonds as a food ingredient still outweighs consumption as a snack in Germany.

Market trends

This section provides more detail about specific trends in the markets for almonds in Germany.

Analysis and Interpretation:

• Social factors
  o 60% of almond consumers account for 90% of sales, so it is important to try to identify those consumers most likely to purchase. 40% of nut buyers eat them as a source of protein.
  o There is a shift in how people think about almonds, with improvements in almond ratings on snack-specific attributes - natural, convenient, health and indulgence are high on the list, according to market research specialists Sterling Rice. The share of total almond purchases that were intended to be eaten as a snack increased significantly from 2010 to 2012.
  o According to Innova Market Insights, there were 6,761 new products containing almonds introduced around the world in 2013, of which 640 were in Germany. See some examples in Figure 6. Almond milk, almond nut butters and almond flour are just a few of the applications of almonds that are driving demand.
  o A growing trend is products offering a combination of health linked with indulgence. This is seen in an increase in exotic chocolate products with almonds or other nuts. Almond flavoured coffee is another emerging combination with the emphasis on indulgence.
  o Naturalness is a key area of consumer interest. New product nut launches marketed as "organic", "natural" or "additive-/preservative-free" featured strongly, while "fibre", "protein" and "low sodium" claims were also popular.
  o The German organic market is the biggest in the EU and although people perceive almonds to be healthy anyway, there is a significant group that are prepared to pay a premium price for organic.
  o Product quality and product safety, a bigger issue in Germany than most other

Considerations for action

• Try to identify the types of German consumers most interested in purchasing almonds. Ask industry experts and carry out your own research to find out who are the most important consumers. Is it those interested in healthy eating, older consumers, affluent consumers, consumers from specific ethnic groups?

• Consider how this trend of healthy indulgence can be applied to your own products.

• Find out more about the health claims of almonds. Be sure to be clear about what can be said and be careful not to make any false claims. For more information on nutrition and health claims refer to the EU website.

• Consider certification and labelling of your products as Organic. See earlier section about different organic certification options.

be interested to check some of their members to see whether relationships could be formed.

Consider where these sales are taking place. Are they online, are they in supermarkets? What is the most popular packaging size and format?

Carry out further research to establish which other food market sectors may be of interest for almonds.
EU member states, makes the issue of certification high on consumers’ agenda.

- Almonds are popular with many of the ethnic population groups in Germany, particularly those from India, Turkey and North Africa. Almonds flavoured with ethnic spices are a growing trend.
- Almonds are often purchased on impulse, hence the visibility of the product in store and the appeal of the packaging are important factors.
- German consumers are particularly environmentally conscious in terms of recycling and disposal of packaging.

**Technological factors**
- Online food shopping is continuing to grow, in conjunction with the importance of social media in communicating new products, ideas for recipes and flavour combinations. This has implications for speed of communication within the supply chain, as well as to consumers.

**Economic factors**
- Value for money remains a prime concern for German consumers, and remains important despite the economy slowly emerging from the downturn. In-home consumption of almonds remains strong, and consumption is now spread throughout the year.
- As well as single packs, there is a trend to larger size packs for sharing in social occasions. New packs (school lunch box) have also been introduced targeting children to encourage them from a young age to eat almonds.
- Drought in California, fires in Spain and growing demand in China has pushed prices very high in Germany at the end of 2013. This affected sales at the important Christmas market period.
- The German Confectionery Trade Association noted high price rises for some raw materials, especially almonds in 2013 but also stated that the positive trend for snack products is continuing, particularly salty snacks.

- Consider the importance of this target group, and whether there are other related benefits that can be made in terms of the origin of your own products.
- Check that packaging materials comply with EU and German domestic regulations in terms of recycling and disposal. The Green Dot system for recycling is well recognised.
- Make sure you have the technical facility to communicate with both trade customers and direct purchasers. Ensure that your procedures and processes for supplying product are efficient.

- Have you considered offering a range of differing pack sizes to cater for price conscious consumers who wish to buy in bulk?
- As well as the established niche opportunities for organic and fair trade variants, look for other emerging relevant trends, such as "free from" products.
- Consider whether you have been affected by price rises. The international price tends to be set by factors in the USA due to their dominant supply position. Can you benefit from this situation?
Market channels and segments

This section provides some information about the marketing channels through which almonds are marketed in the EU, including Germany. Figure 7 provides a broad overview of the routes to market, and Figure 8 illustrates the possible end uses for different almond types.

Figure 7: Market channels for almonds in Germany

The top line highlights the supply structure overview, while the second horizontal line summarizes the key actors in the chain. All activity to the left of the first vertical dotted line refers to activities within the exporting country. All other activity occurs within the importing country. In relation to this, it is important to reiterate the regular involvement of transition countries such as Turkey that are important channels/routes to the German market for other countries such as Kyrgyzstan and neighbouring states.

Analysis and Interpretation:
- **Middleman or not?**
  - The choice here is usually dependent on the size of the exporter. Although some larger supermarkets choose to import directly from the producer, smaller exporters would usually use a traditional wholesaler or importer.
  - The other key issue would be the degree of specialisation or exclusivity of the product. The more specialised your product, the more specialised the distributor should be.

Considerations for action
- Understand the growing strength of retail private labels. These large retailers insist on large volumes and consistency of supply, as well as transparency throughout the supply chain. Consider the benefits of entering into a supply agreement with a large retailer to supply their private label. Which segment would you be most suited to deal with?
- If you want to work with an importer, try to find out the extent of his contacts and whether you think that particular importer is best suited to reach the ultimate...
Which segment?
- Building a long-term working relationship with your customers is essential, irrespective of which channel you select. It is claimed that chocolate manufacturers use 40% of the global supply of almonds. Euromonitor estimate that less than half of all nuts are sold through the retail trade, with the greater proportion being used elsewhere.
- Supplying the retail trade - supermarkets, health food shops and other specialist shops - will get your product in front of the end consumer but the concentrated buying power of the leading chains sometimes comes at a high cost.
- The foodservice sector is a diverse segment. The public sector caters to hospitals, prisons etc, while the private sector covers restaurants, hotels etc. Both are interesting options, with advantages and disadvantages between the public and private.

Talk to as many experts in the trade that you can to fully appreciate the specific issues on the German market before making this important commitment.

Ask yourself whether your processing capacity is labour-intensive or capital intensive. Labour-intensive processing is more suited to prepare snack-based products, whereas capital-intensive processing is more appropriate when almonds are used as an input in the food processing industry.

Consider whether you wish to develop a visible presence on the market, in which case the retail trade would be your preferred route. Alternatively there are also possibilities to develop good sales through the other channels.

Figure 8: Segment application for almond variants in Germany

<table>
<thead>
<tr>
<th>Almond preparation</th>
<th>Food application</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Whole</td>
<td>Natural, roasted, flavoured snacks; Chocolate or sugar-coated sweets Ingredients for food industry</td>
</tr>
<tr>
<td>2. Slices or flakes</td>
<td>Toppings for salad Ingredient for cereal Garnish for baked or prepared food</td>
</tr>
<tr>
<td>3. Silvers or halves</td>
<td>Roasted or flavoured snacks Ingredient for baked goods or cereal Texture for confectionery Topping for prepared food</td>
</tr>
<tr>
<td>4. Diced or chopped</td>
<td>Toppings for baked goods Coatings eg for ice cream Fillings for baked goods</td>
</tr>
<tr>
<td>5. Meal or paste</td>
<td>Ingredient and filling for confectionery Coating for fried food Flavour enhancer or sauce thickener</td>
</tr>
</tbody>
</table>

Prices
This section covers the important question of prices, costs and margins. It is useful to work backwards from retail prices, then to look at the different margins expected by the various actors in the supply chain in order to calculate your own ability to compete in this market. Each customer has their own specification, which will vary between the different market segments. Sampling and analysis is required in each instance to determine and confirm the quality. The similarity with apricot kernels means there is sometimes a relationship between the price of each. Here is an illustration of the different segments within the German retail trade for almonds.
Figure 9: Indication of price ranges and market segments

**Analysis and Interpretation:**
- Almond kernels in the lower segment are sold at high volumes and at relatively low margins. In this part of the trade, there may be some substitution or mixing with apricot kernels, as apricot kernels tend to be cheaper than almonds. Quality aspects in terms of size and grading are less demanding, but standards are still high. Unlike walnuts, where colour is particularly important, size tends to be the most important determinant of almond quality, hence the market segment where they end up.
- Mid-market almonds are of a higher class and standard. These products are usually sold in retail under manufacturers’ brands or private labels. They have some added value characteristics, such as innovative packaging (e.g., printed cartons or sachets), making it possible to obtain relatively higher margins.
- The premium part of the market requires the highest quality standards and you will need to demonstrate that you qualify to provide additional quality reassurance on the labelling, such as the organic standard or fair trade label.

**Considerations for action:**
- Be aware of the differences between supplying the food service or food ingredient segment, compared with the retail market. Products here would usually be "category 2" graded product, according to the UNECE standards.
- The mid-market segment would require either "category 1" or "extra category" product.
- Be aware of the issue of apricot kernels being passed off as almonds and try to find out in which segment this might take place.
- The premium sector would insist on the highest quality "extra category": If you wish to engage in this segment, consider that you have researched all the options that maximise the quality product and presentation possibilities.

The following estimates can vary between different product types, formulations and sources of supply, and other considerations such as branding, packaging. For example, for fair trade and organic products, producers will achieve a higher proportion of the ultimate selling price. Despite the greater costs involved in certification, this can amount to between 30-50% more value addition than for conventional product. Retailer margins can also vary considerably, depending on the scarcity or demand of a particular product.
Figure 10: Breakdown of how the cost is shared throughout the supply chain

| Source: Searce estimates |

This figure highlights the importance of value addition for DC exporters. Many traders think purely in terms of the retail selling price. There is considerable scope to add value to products, including almonds, in the production and export processing stages within the supply chain. Correct documentation can also provide added value at the "Product" stage. The wide variances in the contribution of each stage to the final selling price highlights the opportunities to add value.

Useful sources

Check the various links provided throughout this document, but here are some other useful references:

Export and market entry support:

Some importers and wholesalers:
- Gusthav Küchler http://www.kuechler.com/mandel.html
- Horst Walberg http://www.howa.de/en
- Michael Priestoph http://www.priestoph.de/Home

Trade press
- The Cracker is the official publication of the International Nut & Dried Fruit Council http://www.nutfruit.org
- The Clipper monitors the world-wide trade in dried fruit and nuts http://www.agropress.com
- Food News and The Public Ledger http://www.agra-net.com

Almonds:
- German edible nut wholesale trade association http://www.waren-verein.de
- European edible nut association http://www.frucom.eu
- Information on the EU Food Industry http://ec.europa.eu/enterprise/sectors/food/index_en.htm
More information

This survey was compiled for CBI by Searce in collaboration with Klaus Dürbeck

Disclaimer CBI market information tools: http://www.cbi.eu/disclaimer
## Annex

Here are a selection of almond retail packs that can currently be found on the German market, illustrating the wide variety and consumer choice available. These products can be found on a number of websites, including Amazon. Prices were accurate as of May 2014 but will vary between retailers:

<table>
<thead>
<tr>
<th>Brand</th>
<th>Product Description</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Seeberger</td>
<td>Almonds 1x500g pack</td>
<td>€ 8.39</td>
</tr>
<tr>
<td>Rapunzel</td>
<td>European organic almond kernels 500g</td>
<td>€ 9.49</td>
</tr>
<tr>
<td>Morgenland</td>
<td>Organic almonds 250g</td>
<td>€ 6.20</td>
</tr>
<tr>
<td>Clasen</td>
<td>Organic almond kernels 3x200g</td>
<td>€ 8.85</td>
</tr>
<tr>
<td>Food Fellow</td>
<td>Top quality Californian almond kernels 1kg</td>
<td>€ 12.09</td>
</tr>
<tr>
<td>Dennree</td>
<td>Organic almond kernels, 500g</td>
<td>€ 9.01</td>
</tr>
<tr>
<td>Naturata</td>
<td>Organic European almonds 200g</td>
<td>€ 3.99</td>
</tr>
<tr>
<td>Gepa bio-fair</td>
<td>Whole almonds 100g</td>
<td>€ 1.99</td>
</tr>
</tbody>
</table>