An Overview of
The Nut Industry

Mr. Pratap Nair
Board Member
Ambassador
INC International Nut and Dried Fruit Council
Vision

- To be the international source for information on Nuts and Dried Fruits for health, nutrition, statistics, food safety, government standards and regulations regarding trade barriers and agricultural quality standards.

Mission

- To stimulate and facilitate sustainable growth in the global Nut and Dried Fruit Industry.
INC aims for

- Being the international source of information on health, nutrition, statistics, food safety, government standards and regulations regarding trade barriers and agricultural quality standards.
- Cooperating with national and international institutions, such as Codex Alimentarius and UN, to further global N&DF trade.
- Promoting scientific research on the health benefits of N&DF consumption.
- Increasing the understanding about production, trade and consumption trends worldwide.

Helping the Nut & Dried Fruit industry to grow.

Information resources

Statistics

Industry's voice

Health & nutrition
About us

17 Products
- Almonds
- Apricot Kernels
- Brazil Nuts
- Cashews
- Hazelnuts
- Macadamias
- Pecans
- Pine Nuts
- Pistachios
- Walnuts
- Peanuts
- Dates
- Dried Apricots
- Dried Cranberries
- Dried Figs
- Prunes
- Raisins, Sultanas & Currants

Membership: **+750 companies from +80 countries.**
- A Board of Trustees from 12 countries.
- Ambassadors in +30 countries.
- An international team: 11 sub-committees.

Publications
- Monthly Newsletter
- Weekly *Cracking the News*
- *Nutfruit* Magazine
- Online Database
- Statistical Yearbook
- Trade Flows World Map
- Technical Information Kits
Global Cashew Council

- **Vision**
  - Achieving global growth and sustainability of the cashew nut sector.

- **Mission**
  - Promoting the global cashew nut sector by increasing awareness of the health benefits of cashews, promoting usage and consumption, and promoting food safety and quality standards.
Goals

1. To provide worldwide statistics of cashew production and consumption trends and to promote growth with a good balance between supply and demand.
2. To study and promote usage and consumption of cashews using appropriate platforms throughout the world.
3. To research the nutritional profile of cashews, to determine appropriate health platforms and possible health-claims, and to validate these benefits with scientific research including clinical trials.
4. To launch a program of activities to disseminate and publicize health messages related to cashews around the world.
5. To evaluate and suggest basic industry-standards for compliance with food safety regulations and issues internationally, and to work with regulatory bodies worldwide on food safety, social and ethical issues related to cashews.
6. To work actively on global cashew standards, with adaptations for different origins and destinations if necessary.
7. To evaluate possible synergies in the cashew value-chain and create added value to benefit producers, processors, traders, the food industry and the final consumer.
8. To liaison with international institutions such as the FAO, WTO, WHO, EU, CFC, etc. and other governmental and non-governmental bodies to gather necessary support for the above activities.
Highlights

- GCC-funded study: Clinical trial, cardiovascular benefits of cashews, led by Dr. David J. Baer, USDA Beltsville Human Nutrition Research Center.


- Technical Information Kit: a basic understanding of using cashews (characteristics, applications, food safety and quality standards).
  - English
  - Spanish
  - French
  - Vietnamese
Nuts & Dried Fruits are a growing trend!

- The growing demand of N&DF is partly explained by the increase of consumers’ health awareness which, at the same time, is explained by the industry efforts on communicating the health benefits of N&DF.
### Nutrients
Cashews are high in **vitamin K** and minerals such as **iron, magnesium, phosphorus, zinc, manganese and copper**. They are also a source of **fiber**, thiamin, pantothenic acid and minerals as potassium and selenium.

### Fatty acids
Cashews are relatively high in fat, but **most of that fat (80%) is unsaturated**. Saturated fat can raise blood cholesterol levels, which can increase the risk of cardiovascular disease (CVD). On the contrary, unsaturated fats, such as mono- and polyunsaturated fats, can actually decrease low-density lipoprotein (LDL or "bad" cholesterol) levels.

### Vitamin K
Vitamin K contributes to normal blood clotting and to the maintenance of normal bones.

### Iron
Of all nuts, cashews contain the highest amount of iron (6 mg/100 g).
- According to WHO, cardiovascular disease (CVD) and diabetes are leading causes of mortality worldwide, causing millions of deaths every year.

- Epidemiological and clinical studies have found that nuts may have beneficial effects on CVD risk and type 2 diabetes. However, the relation between cashews (in particular) and CVD and diabetes had been, until now, little investigated.

- In the last few years, several clinical trials led by distinguished researchers in the USA and India have examined the effect of cashew consumption on CVD risk and diabetes.

- These new studies are expected to make a landmark contribution to understanding the health benefits of cashews.
Dr. David J. Baer and his team (USDA Beltsville Human Nutrition Center) have investigated the effect of cashew consumption on traditional and emerging markers of cardiovascular disease risk.

Moreover, they measured the usable energy content of a serving of cashews for accurate food labeling.

40 participants were recruited to participate in a 9-week feeding study. Participants consumed a controlled base diet supplemented with 42 g/day of cashews during one treatment period (4 weeks), and a controlled base diet with no-cashew supplementation (control group) during another treatment period (4 weeks).

This study was funded by the Global Cashew Council (GCC), which is coordinated by the INC International Nut & Dried Fruit Council.

Pending publication
Dr. V. Mohan and his team (Madras Diabetes Research Foundation, India) assessed the changes in **glycemic and lipid profile among type 2 diabetic subjects** after a daily supplementation of cashews in their diets.

In addition, they evaluated the effects of daily cashew supplementation on **blood pressure**.

300 participants were randomly assigned either to an intervention or a control group in a 12-week feeding study.

This study was funded by the Cashew Export Promotion Council of India (CEPCI).

Pending publication
The *American Journal of Clinical Nutrition* published the study “Cashew consumption reduces total and LDL cholesterol: a randomized, crossover, controlled-feeding trial” in March 2017.

The main objective was to investigate the effect of cashew intake on serum lipids in adults with or at risk of high LDL cholesterol. 51 participants were included in the trial. They consumed a typical American diet with cashews (28-64g of cashews per day) for 28 days or potato chips in the control group.

The results found that **daily consumption of cashews**, when substituted for a high-carbohydrate snack, in a typical American diet **may help decrease total cholesterol and LDL (“bad”) cholesterol**.

This study was funded by The Kraft Heinz Co.
Industry Overview
Production

World Cashew Production (Metric Tons)
Source: INC

2017/2018 Cashew Production
Kernel basis (Metric Tons). Source: INC

- Western Africa, 44%
- India, 24%
- Vietnam, 9%
- Brazil, 5%
- Eastern Africa, 11%
- Others, 8%
Trade

World Tree Nut Exports (Metric Tons)
Source: DESA/UNSD UN Comtrade Database and EC Export Helpdesk (2016)

<table>
<thead>
<tr>
<th>Tree Nut</th>
<th>In-shell</th>
<th>Shelled</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cashews</td>
<td>1,089,526</td>
<td>496,019</td>
</tr>
<tr>
<td>Almonds</td>
<td>299,963</td>
<td>700,952</td>
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<tr>
<td>Walnuts</td>
<td>306,309</td>
<td>226,007</td>
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<tr>
<td>Pistachios</td>
<td>360,981</td>
<td>32,745</td>
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<td>Hazelnuts</td>
<td>33,276</td>
<td>209,253</td>
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<td>Pecans</td>
<td>117,128</td>
<td>60,563</td>
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<td>Macadamias</td>
<td>54,509</td>
<td>31,187</td>
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<td>Brazil Nuts</td>
<td>20,762</td>
<td>29,477</td>
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<tr>
<td>Pine Nuts</td>
<td>13,791</td>
<td>21,580</td>
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<tr>
<td><strong>Total</strong></td>
<td><strong>2,296,246</strong></td>
<td><strong>1,807,783</strong></td>
</tr>
</tbody>
</table>

Exports 2016 (Metric Tons)
# Trade

### World Cashew Exports (Metric Tons)

Source: DESA/UNSD UN Comtrade Database and EC Export Helpdesk (2016)

#### Cashews In-shell (HS code: 0801 31)

<table>
<thead>
<tr>
<th>Origin</th>
<th>Destination</th>
<th>Exports (MT)</th>
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</thead>
<tbody>
<tr>
<td>West Africa</td>
<td>India</td>
<td>485,975</td>
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<tr>
<td></td>
<td>Viet Nam</td>
<td>171,928</td>
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<td></td>
<td>World Total</td>
<td>776,528</td>
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<tr>
<td>East Africa</td>
<td>India</td>
<td>155,305</td>
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<td></td>
<td>Viet Nam</td>
<td>83,647</td>
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<td></td>
<td>World Total</td>
<td>239,473</td>
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</table>

#### Cashews Shelled (HS code: 0801 32)

<table>
<thead>
<tr>
<th>Origin</th>
<th>Destination</th>
<th>Exports (MT)</th>
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<tbody>
<tr>
<td>Viet Nam</td>
<td>USA</td>
<td>111,189</td>
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<tr>
<td></td>
<td>EU+EFTA</td>
<td>91,825</td>
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<td></td>
<td>Australia</td>
<td>15,675</td>
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<td></td>
<td>Canada</td>
<td>9,690</td>
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<td></td>
<td>Thailand</td>
<td>7,457</td>
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<td>World Total</td>
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<td>India</td>
<td>United Arab Emirates</td>
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<td>EU+EFTA</td>
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<td></td>
<td>USA</td>
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<td></td>
<td>Saudi Arabia</td>
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<td>Japan</td>
<td>6,113</td>
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<td></td>
<td>World Total</td>
<td>85,097</td>
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Consumption

Estimated World Cashew Consumption (Metric Tons)
Kernel basis. Source: INC

<table>
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<tr>
<th>Year</th>
<th>India</th>
<th>North America</th>
<th>EU+EFTA</th>
<th>China</th>
<th>Australia</th>
<th>Others</th>
<th>World Total</th>
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<td>2015</td>
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World Nut and Dried Fruit Congress

Since 1980

100's of companies

Avg of 1000 participants

60 countries

20 round tables, seminars and keynote presentations

60 speakers

The world’s greatest N&DF event.

- A unique platform for participants to learn, network, and share knowledge and ideas.
- Industry’s top leaders and experts.
Sevilla

INC XXXVII WORLD NUT AND DRIED FRUIT CONGRESS

MAY 21-23, 2018, SPAIN

We look forward to seeing you!
Thank you for your attention