



# Apple is a symbol of health

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Apple is a symbol of health, beauty and love. It is a fruit which has universal cultivation and worldwide consumption in many forms. Apple is a highly nutritive fruit containing essential food elements such as sugar 11%, fat 0.4%, protein 0.3%, carbohydrates 14.9% and vitamins A, B & C in a balanced form. In America and Europe it is considered as a bottle of vitamins. It ranks third in consumption after citrus and banana and is almost available throughout the year.

According to British Medical Journal, research showed that eating whole fruits particularly blueberries, grapes and Apples - was 'significantly associated with a lower risk of type 2 diabetes.

**Production:** In Pakistan, Apple cultivation is limited to upland areas of Balochistan, hilly tracts of Punjab and Khyber Pakhtunkhwa. Balochistan produces a wide range of fruits and vegetables of good quality, and in quite sizeable volumes. From horticultural point of view, Balochistan can legitimately be called as the fruit basket of Pakistan. It excels in the production of a number of fresh and dry fruits, some of which are not grown anywhere in the country. Balochistan is the major contributor in Apple production as well by producing 438,000 tonnes of Apple, which is about 77% of country's produce. In the uplands, there is very little rainfall during fruiting season and hence

high quality deciduous fruits like grape, Apple, plum, apricot, and almond are grown. In Pakistan, Apples are grown in temperate parts (hilly tracts) of Punjab, Khyber Pakhtunkhwa region and Quetta region of Baluchistan. The total area under Apple cultivation in Pakistan is 1,13,100 hectares with annual fruit production of 566,700 tonnes. Apple requires a cool climate as buds of Apple exhibit long rest period and require more chilling than buds of other deciduous fruit trees.

There are more than 7,500 known cultivars of Apple, resulting in a range of desired characteristics. Different cultivars are bred for various tastes and uses, including cooking, fresh eating and cider production. The different cultivars are adapted to various climatic conditions ranging from temperate to sub-tropical conditions to some extent

Baluchistan is the key contributor of Apple production in Pakistan while KPK stands on second number with contributing 22% of national Apple growth.

Apple production normally starts in December and January but few farmers also seed in monsoon weather. In Pakistan Tong and Clift drafting are the most practicable among farmers from which they can get fruit on 20 to 30 centimetre of earth level. If planting in monsoons, Apples are planted by T-blooding technique, which is the best technique for this season.

**Table-1 Production of Apples in Pakistan ('000' Tonnes)**

Year	Punjab	Sindh	KPK	Baluchistan	Pakistan
2000-01	2.8	0.2	117.5	318.4	438.9
2001-02	2.5	0.2	117.4	247.0	367.1
2002-03	3.6	0.1	110.1	201.6	315.4
2003-04	3.6	0.1	106.3	223.8	333.8
2004-05	3.6	0.1	127.9	220.3	351.9
<b>5 - Years' Average</b>	<b>3.2</b>	<b>0.1</b>	<b>115.8</b>	<b>242.2</b>	<b>361.4</b>
2005-06	3.6	(b)	126.7	220.9	351.3
2006-07	3.6	(b)	125.2	219.5	348.3
2007-08	3.5	(b)	124.5	313.6	441.6
2008-09	3.7	(b)	130.8	306.5	441.0
2009-10	3.4	(b)	112.1	250.9	366.4
<b>5 - Years' Average</b>	<b>3.6</b>	<b>(b)</b>	<b>123.9</b>	<b>262.3</b>	<b>389.7</b>
2010-11	3.5	(b)	95.6	426.8	525.9
2011-12	3.4	(b)	120.2	428.3	551.9
2012-13	3.6	(b)	125.1	438.0	566.7

Source: Agriculture Statistics of Pakistan - 2011-12 Government of Pakistan

After Baluchistan and KPK, Punjab province also contributes in Apple's production as its upper part Potohar and Muree also produce Apples. Azad Kashmir is also a renowned place of Apple growth and Kashmir's Apple is used as term because of its taste.

Apple productions in Baluchistan are increased due to scientific research based farming implemented there. Ayub Agriculture Institute conducted this research. By using this research, Baluchistan's Apple is in High demand and in addition its per Acre production has also increased.

There are various types of Apple, which are produced in Pakistan, but according to UNDP's research JUNGLE'S Apple is the root of all group of Apples available in the world and its genetic roots are from Kazakhstan. It is used in different ways such as cooked; jams and jellies, fresh Apple juice and vinegar etc. It is the most refreshing fruit and also has aesthetic and appetitive appeal. Production of Apples are given in Table-1.

**Exports:** Overall export of Apple has witnessed a steady growth. In 2011- 12, Apple exports were 1,449 tonnes valued at Rs 48.86 million rising to 1,280 tonnes valued at Rs54.58 million in 2012-13 in terms of value. Pakistan mainly exports Apple to Afghanistan, Bahrain, Bangladesh, Norway, Oman, Qatar, Sri Lanka and UAE Afghanistan is the largest importer with market share of about 32% while Bahrain and Qatar are second and third largest importers with shares of 18% and 13% respectively. Export of Apples are given in Table 2 and country wise exports are given in Table 3.

Country	2012-13		2011-12	
	Quantity	Value	Quantity	Value
Afghanistan	209	8,268	1,210	37,460
Bahrin	14	673	65	220
Bangladesh	159	6,167	--	--
Norway	7	293	--	--
Oman	172	7,594	--	--
Qatar	--	--	1	9
Sri Lanka	278	11,297	--	--
U.A.E.	442	20,291	233	11,172
<b>Total</b>	<b>1,280</b>	<b>54,583</b>	<b>1,449</b>	<b>48,862</b>

Source: Federal Bureau of Statistics, Government of Pakistan

The following problems and their remedial measures are suggested:

- ❖ Improvement in varieties and plants.
- ❖ Improvement in farmer product knowledge.
- ❖ Controls on the usage of fertilizers and sprays.
- ❖ Improve washing and waxing facilities.
- ❖ Better packing materials and boxes
- ❖ Educating staff in produce handling techniques.
- ❖ Need to develop internal quality control systems.

## World Apple Production

Apple is a highly nutritive fruit today, Apple is among the most valuable brands in the world. There are more than 7,500 cultivars of Apples in the world having different characteristics.

Worldwide on a commercial scale, there is an estimated 75 billion tonnes of Apples produced in 2012. Of this, over 10% are traded internationally in their fresh form. In 2012 there was an amount of 8.2 million tonnes with a net worth of \$ 8 billion (6.4 billion Euros).

China is by far the largest Apple producer and alone produces 37 million tonnes which is around half of the total (commercial) production. Other large producers are the USA (4.1 million tonnes), Turkey (2.9), Poland (2.9), India (2.2), Italy (2.4) and France (1.9). Until last season China was also the world's most important exporter; they exported 1 million tonnes apples. Last season, however,

Poland surpassed China with exports of up to 1.2 million tonnes. Next to these two power houses follows Italy, the US, Chile and France world top apple producing countries - 2012 are given in Table 4.

**Imports:** Russia is viewed worldwide as the greatest Apple

**Table 2: Exports of Apples from Pakistan**

Year	Quantity	Value	
	(Tonnes)	(Rs. Million)	US\$ (000)
2008-09	2,278	67	854
2009-10	1,573	40	477
2010-11	1,329	49	495
2011-12	1,449	49	547
2012-13	1,280	55	564

Source: (i) Federal Bureau of Statistics, Government of Pakistan  
(ii) Trade Development Authority of Pakistan

importer. Last season 2012-13, Russia again grew and imported around 4 million tonnes. Poland is the main supplier and is also the country which has filled the gap in the Russian market. Imports from Poland accounted for 60%, more than 750,000 tonnes. Last season, next to Russia, Germany is second on the list with an import of just under 500,000 tonnes. Germany stays just in front of the UK. Last season, the UK's import of Apples grew to around 487,000 tonnes. The Netherlands were the fourth largest importer last season, with an import of 330,000 tonnes. The international trade in Apple juice is also very high. In 2012 this was worth \$3.3 billion. China is again the largest supplier with Poland in second place. The USA and Germany are important import countries. The Netherlands are in 7th place.

**Table 4: Global Top Apple Producing Countries (000 Tonnes)**

Country	2010	2011	2012
China	33,265	35,987	37,000
United States	4,210	4,272	4,110
Turkey	2,600	2,680	2,889
Poland	1,877	2,493	2,877
India	1,777	2,891	2,203
Italy	2,204	2,411	1,991
Iran	1,662	1,651	1,700
Chile	1,100	1,169	1,625
Russain Federation	992	1,200	1,403
France	1,788	1,858	1,382

Source: Statista - The Statistics, Portal.

**Exports:** Over recent years Apple trade has changed. The bulk of world trade still finds its place within EU countries. Last season EU countries exported a total of 3.6 billion tonnes. Nearly 60%

## Exclusive on Apple

stayed within EU borders and 1.6 billion tonnes went to countries outside the EU. All EU countries together exported in 2012-13 870.000 tonnes to Russia of which 735,000 tonnes originated from Poland, but only 5,000 tonnes from The Netherlands compared to 18,000 tonnes in 2011-12.

With export programmes into Asia, Europe, the US and the Middle East now underway in earnest, early season indications are the company will exceed its expectations.

Apple supplies a range of customers globally and sales are definitely up across various markets. Growing and weather related issues in other Apple production regions have meant less availability of Apples in total.

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