

CONDITIONED FRUIT: IS IT WHAT CONSUMERS ARE LOOKING FOR?

Kevin Moffitt

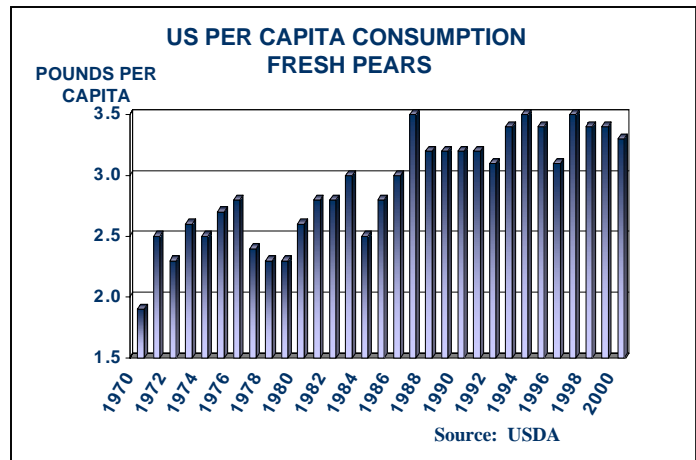
Pear Bureau Northwest

kmoffitt@usapears.com

FRESH PEAR CONSUMPTION

I am pleased to talk about the Pear Bureau's conditioned pear program and review today's consumer preferences. To begin, let's take a look at fresh pear consumption in the United States.

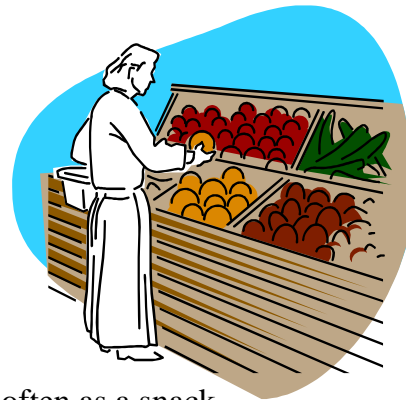
As you can see from this graph, consumption of fresh pears has grown 84% since 1970 rising from under two pounds per capita to about 3.5 lbs today. However, after peaking at 4 lbs in 1988, consumption has been relatively flat, but it has been keeping up with population growth.



In order to gain a better understanding of the purchase drivers and consumer preferences for pears, as well as of today's consumers usage and attitudes regarding fresh pears, the Pear Bureau conducted research last April in which a research company conducted 1200 consumer interviews in supermarkets nationwide. The results revealed the following: we have a loyal consumer base primarily consisting of female Caucasians living in households with no kids and a relatively high level of income. Average purchase is 3 or more, large-sized pears, which are most often consumed as a snack..

Typical Pear Consumer

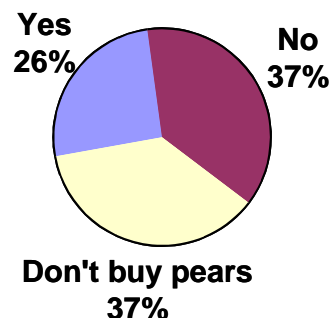
- The pear consumer is a medium-to-heavy user generally buying 3 or more large-size, bulk pears at a time.
- Typical Consumer
 - 35 - 44 Years Old
 - 2 Adults with No kids
 - \$50,001 - \$75,000
 - Caucasian
 - Female
- Seventy-one percent of those who consume pears are 31 years or older.
- Consumers continue to eat pears most often as a snack.



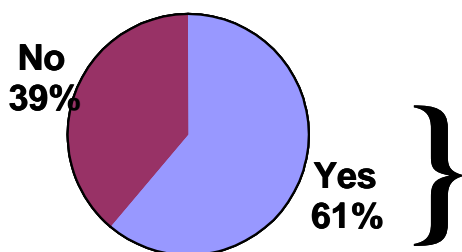
The study also revealed that this loyal consumer base is relatively small with just over 26% of consumers planning to buy pears when they enter the supermarket.

Pears are an extremely high impulse item with only 16% of consumers planning to purchase pears when entering the store. While fruit is generally an impulse purchase, pear impulse purchase is low when you consider that nearly half of consumers plan to purchase apples and bananas when they enter the store.

Do you usually plan to buy pears before entering the store?



Were you planning on buying fruit before you entered the store today?



What fruit items?

	Percent
Apples	51%
Bananas	49%
Oranges/Tang.	30%
Grapes	25%
Pears	16%
Stone Fruit	8%
Grapefruit	8%
Strawberries	6%
Kiwi	5%
Melons	5%
Other	4%
Tropical Fruits	3%

Multiple responses allowed

When asked why they purchase pears, 41% of consumers in this study reported that they do so due to pears flavor followed by appearance. Interestingly enough, when asked why they didn't buy pears, 48% of consumers responded that flavor or taste was the reason they did not purchase pears. So taste is the primary reason why they bought pears and taste is the primary reason why consumers do not purchase pears.

What is the primary reason you buy pears?	
Flavor	41%
Appearance	24%
Other*	12%
Sweet	8%
Juicy	8%
Recipe called for it	4%
Attractive	3%
Total	100%

* Other includes "health/diet," "feel like pears," "for kids" and "price".

What is the primary reason you DON'T buy pears?	
Flavor	48%
Price	25%
Other*	11%
Appearance	10%
Ripeness	7%
Total	100%

* Other includes "don't like them," "like other fruit," "don't like the texture" and "usually too hard."

This tells us that our loyal consumer base of consumers like pears due to their flavor while many consumers may be turned off by the flavor of an unripe pear, thereby limiting repeat purchase.

Furthermore only eight percent of consumers know to check near the stem when checking for ripeness. 57% think that feeling for softness in the middle of the pear will tell when it is ripe. As you and I know, this means that many people, even if they are waiting until they think the fruit is ripe, are most likely eating pears that are overripe or mushy . . . not a satisfying eating experience.

How do you tell if a pear is ripe?	
Feel/softness in middle of pear	57%
Color	20%
Smell	13%
Feel/softness at stem of pear	8%
Don't know	2%
Total	100%

These results agree with other consumer studies that show that today's consumers are looking for flavor in the fruit they buy. We have seen it in the shift to more flavorful apple and tomato varieties for example.

The Pear Bureau has made consumer education regarding how to know when a pear is ripe a priority incorporating this thumb test into POS, consumer pamphlets and our new updated website.

But consumers are also in a hurry. Today's Americans are a fast food, immediate satisfaction society and people are looking for cell food . . . that is, food they can eat with one hand while on their cell phone or driving. In general, consumers do not want to buy something fresh today and wait for 3 to 5 days to eat it. Teaching them to place fruit in a paper bag helps give them a tool for ripening pears but they still have to wait and often forget to check the fruit. Then, when they do, it is over-ripe.

In addition, when preparing meals they are looking for meal solutions with fewer ingredients, usually no more than 3 or 4. And they are looking for meals that take 15 minutes or less to prepare.

What this means is that we should be providing consumers with a tasty piece of fruit that they can eat today, or tomorrow at the latest, and not a piece of fruit that consumers have to wait long for it to ripen.

So what are we doing about this at retail? The Pear Bureau will be presenting recommendations at the next Executive Committee meeting on March 28th, 2002. Part of these recommendations will be a three tiered approach to shipping fresh pears. The tiers will be based around the following pear pressure guidelines:

Three-Tier Program	
Tier 1—Firm Pears	12 to 14 psi
Tier 2—Triggered or conditioned	8 to 12 psi
Tier 3—"Ready-to-eat"	below 8 psi

Shippers and retailers have different sets of concerns and we need to address both while keeping the ultimate goal in mind, that of providing the consumer with a satisfying eating experience in order to increase repeat purchase and overall pear consumption.

Our program is actually geared to helping shippers who want to ripen at their warehouse as well as teaching or helping retailers or wholesalers learn how to ripen at their end.

Retailers have handling concerns, concerns about merchandising and Shrink or what goes out the back door. We have begun to educate them and will need to do more of this education showing them how to receive conditioned pears, or show them how to condition pears in their own facility, as well as how to merchandise fruit that is softer than they are used to handling. We also need to show them that they will not necessarily have more shrink or waste if they carry ripe fruit or if their shrink goes up it will be off set by increased sales and consumer offtake.

RIPENING CONSULTANT

This year we also hired a conditioned pear consultant. His name is Dennis Kihlstadius and he has worked with the avocado industry as well as the tomato and California pear industries.

He has been retained to conduct handling and receiving seminars as well as teaching pear ripening to retailers, wholesalers, and, for those who want it, shippers in our industry. His seminar includes working with receivers, buyers and produce personnel regarding:

- How to properly use a penetrometer
- Dispelling “myths” and “bad knowledge” about our pears
- Providing them a “3rd party” resource when they have questions
- Teaching the ripeners how to condition pears and the purpose for it
- Showing them the proper handling and storage for pears
- Cutting down on rejected loads due to “old receiving techniques” (poor knowledge of the product)

Since the beginning of December, nine retailers have benefited from this program with additional training scheduled with five other retailers for the rest of the season.

RIPENING GUIDELINES

As some of you may know, I started out as a banana ripener with Dole over 20 years ago. Six years ago I collected and compiled the available data on ripening pears with ethylene and developed guidelines that are included in our handling manual. I had a lot of help and input from Dr. Chen of the Hood River Experiment station. The information was also reviewed by well-known scientists at UC Davis and shippers who have conditioned for years. The idea is to provide retailers or wholesalers with guidelines on how to condition pears in their facilities, perhaps in their banana or tomato ripening rooms.

Ripening with Ethylene

The guidelines can also be used for shippers who want to condition pears at their end, especially in the early season when studies have shown that ethylene conditioning is important when shipping Anjou or Bosc pears before they have had the proper amount of time in cold storage.

Ethylene ripening can also help with more consistent ripening within a box of pears. Ripening with ethylene is a lot easier than many people realize. The main requirements are an airtight room with heating and cooling capacity and an ethylene introduction device such as the catalytic generator shown here. Ethylene is introduced at a low level of 100 ppm and is best accepted when pears are between 68 and 70. Humidity is also a factor that should be considered as 90% relative humidity will help ensure that the fruit retain as much moisture as possible.

Forced Air Ripening Room

In addition to helping interested shippers condition pears at the packing house level and teaching retailers how to condition in banana or tomato ripening rooms in their distribution centers, we are looking into regional wholesalers who can condition and distribute fruit in their local area.

Another interesting area that we are exploring is having banana companies such as Del Monte ripen pears along with bananas in their new “stand-alone” regional processing centers located strategically around the county. For example, putting a few pallets in to ripen with a load of bananas. The keys here are testing how well pears ripen in a banana ripening regimen and ensuring that there are clear responsibility assignments in case of a problem or a canceled retail order.

Mobile Ripening Room

There are other exciting options new to the market as well such as this Mobile ripening room. This is a customized trailer that can be used as a forced air ripening room and even has a built in catalytic generator. This could be used to ripen in transit, or it could be parked near a warehouse to be used as an efficient ripening room - even on a shared basis among many warehouses.

CONDITIONED PEAR STORE TEST

We are also in the middle of developing firm data on the benefits of having conditioned pears for sale in a store. Between January 21 and March 3, we worked with a major mid-west retailer on a conditioned pear test. The retailer identified 3 sets of stores of similar size and demographics. In one set they sold conditioned pears with no signs or POS to alert the consumer. In another set they carried conditioned pears with POS and signs explaining to consumers that these pears are ready or nearly ready to eat. In both cases the pears were conditioned by a shipper and were displayed on shelf between 8 and 12 lbs, generally lower than 10 lbs. The last set of stores were the control stores which sold non conditioned pears with pressure above 12 lbs. A third party audited all of the stores and the chain will be providing us with sales and shrink results so that we can see and quantify the actual benefits of having conditioned pears in the store. While we will not have the final report for another week or so, preliminary results were good with at least 15% increase in the stores carrying conditioned pears. In addition, the produce buying Director described the initial test results as “awesome” and this chain has made the decision to carry conditioned pears exclusively from now on. The official results will be used to sell back to our industry as well as selling other retailers on the benefit of carrying conditioned or triggered pears or pears with pressures below 11 or 12 lbs and preferably closer to 8lbs.

“READY-TO-EAT” CONSUMER PACK

The third and ripest tier in the new program will consist of Ready to Eat pears, with a pressure below 8 lbs. As you may know, one shipper in our industry is currently selling “Ready to Eat” pears in a clam shell in stores in the NW and the NE United States. These pears are shipped with pressures around 7 lbs and have reportedly been well received by the retailers and the consumer. The Pear Bureau has been working with this shipper on such things as developing the name of the product so that this consumer pack can be rolled out by anyone in the industry using the same name if they want to for example “Ready to Eat” pears by Stadelman. In addition, the clamshells that are being developed in a pear shape will also be available for any shipper in our industry to use, adding consistency to the program.



New UPC Codes for Consumer Packs

The Pear Bureau just applied for and received six new UPC codes for these clamshells as well. This will allow for any shippers to use this UPC for this product without going through the time and expense of individually applying for and being assigned a separate UPC.

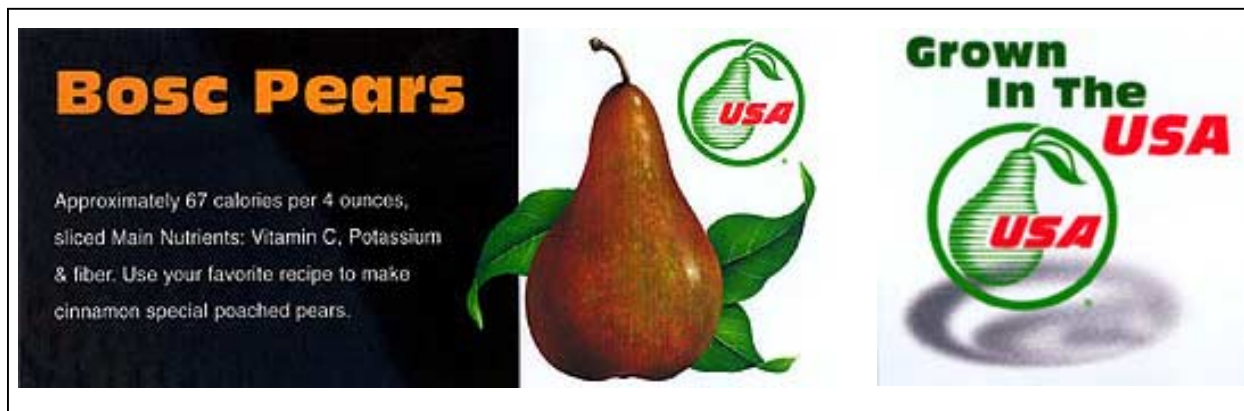
New Display Box

Some retail tools that we have developed which can be useful for this clam shell product include this stand alone display box which will hold a Euro size box or a Packart full box. This display box can be useful in differentiating or highlighting conditioned pears or consumer packs and can be set up near a cheese display, at the checkout or even in convenience stores.



New In-Store Channel Cards

Channel cards, similar to our new Signage shown below, can be used to gain consumer awareness by drawing attention to a display of conditioned pears. Currently we are offering this channel card to retailers for their pear displays. The Grown in the USA extender was developed to provide retailers with an easy way to identify US grown fruit, which is so important this time of year when imports are arriving.



NON-DESTRUCTIVE QUALITY SENSORS

Other new areas to watch include the non-destructive quality sensors that available such as this one developed by Sinclair. The Pear Bureau will be involved in a test of this machine next month when it is installed on a shipper's line. This machine can sense and sort by the pressure of the fruit.

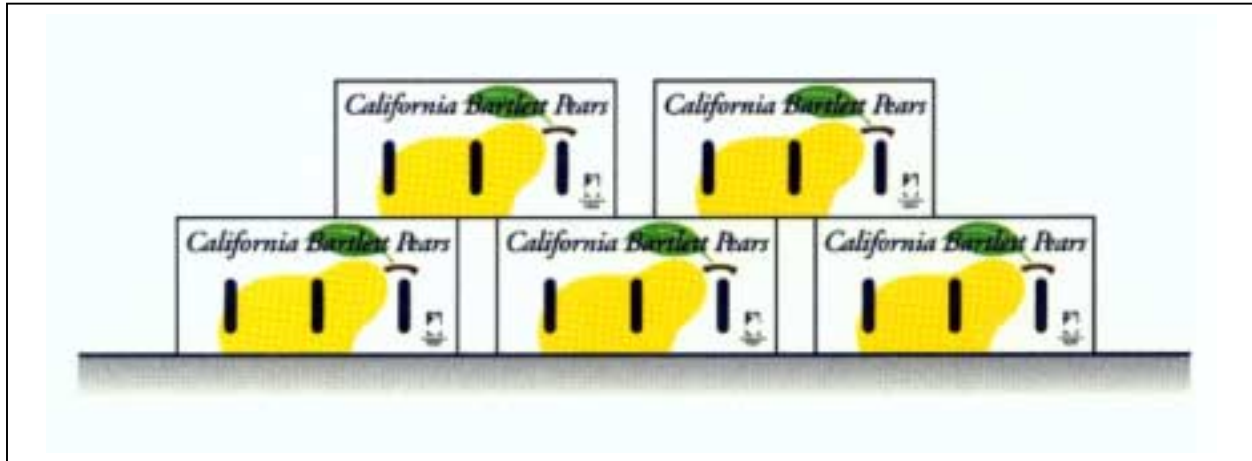
It might be used to sort and market fruit of different firmness. Perhaps UPCs will be developed for individual fruit depending upon ripeness levels for example. UPCs for fruit, by the way, is well on the way of being a reality.



FUTURE IMPROVEMENTS

So what else does the future hold or where do I see areas that can be improved upon? An easy start would be to have our marketing consultant Dennis Kihlstadius work with shippers who want to know more about conditioning fruit at their packinghouse level, perhaps auditing their facilities and techniques. Longer term could include developing standards for conditioned fruit. For example defining what conditioning means, standardizing what pressures are considered conditioned as well as standardizing how the fruit should be conditioned, among other areas. We will of course continue to work with the retailers and wholesalers on their ripening programs as well.

Other areas for study include developing Boxes that are more effective and receptive to conditioning. Many shippers in California are using this box when they trigger their Bartletts. Notice the increased vent area and the fact that the vents can be aligned to ensure that ethylene can get in easily and evenly, then, the heat can be pulled out after conditioning.



I also think that Stadelman's is on the right track with the consumer packaging options and I think we as an industry can take this farther and continue looking into other effective consumer packs as well.

Conditioning fruit may play a roll in any pre cut pear program as well. Fresh sliced pears need to be at a pressure that consumers will accept while being firm enough for shipping and distribution nationwide. The Pear Bureau is helping to find that optimum pressure range. Once it is found, it will be important to have consistency of pressure in the fruit that is being cut packaged and shipped and a conditioning program would be helpful in this instance.

That is a quick overview of the Pear Bureau's program as well as a look at consumer preferences regarding pears. I thank you for your attention and I would be open to questions if we have time.

