



# Table Olives

*Understanding the 'algebra of the consumer mind'*

Dorothy Minkus-McKenna

Howard Moskowitz

Hollis Ashman

Jacqueline Beckley

International Conference on Table Olives

Seville, Spain, March 22-23, 2006

Working draft..do not quote

# Knowledge Warehousing ...

## The Concept

- Most companies need insights about customers ... to better run their business
- Many companies have reams and reams of studies
- A few companies have systematized their insights
- No one has ongoing, inexpensive, powerful way to develop insights

# Platform & Principles

# Four Platforms

- **MEGA:** Create databases, from 'mega studies' in a category (e.g., shopping experience)
- **META:** Database covers relevant aspects of product or service .. Similar pattern across different studies within MEGA
- **IMPACT:** Hot buttons' or 'utilities' for elements, in easy accessible format
- **CLASSIFICATION:** Powerful classification, in addition to conjoint

# Principle #1 ...

## Stimulus - Response

- Point of view ... consumers can't tell exactly what they want ... but they can easily react
- Give them descriptions or vignettes
- Get ratings of interest, relevance..
- Look for 'key drivers
- These are worthy of further attention

# Example Of A Concept Or Vignette

The screenshot shows a Microsoft Internet Explorer browser window. The address bar contains the URL <http://www.ideamap.net/MAL3G6U/preview.asp>. The browser's menu bar includes File, Edit, View, Favorites, Tools, and Help. The toolbar contains icons for Back, Forward, Stop, Refresh, Home, Search, Favorites, History, Mail, Print, Edit, and Discuss. The main content area is a light blue rounded rectangle containing the following text:

You've got to eat it because it's so good for you

A joy for your senses..seeing, smelling, tasting

Endorsed by the American Dietetic Association

At the bottom of the page, there is a question: "How do you feel about this olive?" and a "Rating Scale" consisting of nine numbered buttons (1-9). Below the buttons, it says "1=Hate ... 9=Love".

How do you feel about this olive?

Rating Scale

1 2 3 4 5 6 7 8 9

1=Hate ... 9=Love

# Principle #2

## Systematic design ...

### Better chance to uncover patterns

- Conjoint measurement ... well known research tool
- Create a basic design of inputs ..  
Categories... that transcend products
- Here are the categories ... or 'silos'
- Each silo contains different kinds of stimulus elements ... description, product, etc.

# Example Of A Concept Or Vignette

**Put in architecture of olive**



# Each Person Sees A Different Set Of Computer-Created Concepts

- Rationale ... make sure that all elements are balanced
- And ... make sure that no one combination that is accidentally 'very good' or 'very bad' has a chance to influence the results
- Outcome ... low effort in design (just enter elements), insurance (high quality results)

# Principle #3

## Statistical Modeling

- Goal = discover relations
- E.g., what are the drivers
- Put in 'knowns' (elements) in different combinations
- Get response (e.g., craving; healthful) to the combination
- Relate elements to ratings by regression

## Principle #4 ...

Do large scale test for 'meta' results

- **Why** ... to uncover patterns
- **What** ... across products
- **Who**... across types of people
- How .. by Internet, using easy self-authored conjoint system (IdeaMap®.Net™)

# Principle #5 - Make It Easy To Set-Up, Run, Participate In Study

- Easy
- Rapid
- Broad Reach
- Cost-effective
- Fast ... no worry that we forget why we are doing the study as we 'plod through' ... ten days
- An individual can participate in multiple studies

# Rationales For Internet Work

- Internet interview is now legitimate and endorsed by many well-respected, research-savvy companies (e.g., P&G, General Mills)
- Data often parallel those of central location or phone
- Web allows wider reach of respondents, faster, easier fielding
- No worry that we forget why we're doing the study because it takes too long

# Study "Wall"

*Participant chooses a topic that is interesting*

http://www.ideamap.net/UICS2Y4/craveit.asp - Microsoft Internet Explorer

File Edit View Favorites Tools Help

Back Forward Stop Refresh Home Search Favorites History Mail Print Edit Discuss

Address <http://www.ideamap.net/UICS2Y4/craveit.asp> Go

**Welcome to the CRAVE IT!! survey.**

We are interested in learning what "Crave It" means to **YOU!**  
Please select the survey that you would like to participate in by clicking on one of the yellow buttons.  
You can participate in as many surveys as you wish.  
( You can participate in each survey only once)  
Feel free to send this link to your colleagues.

**Disclaimer:** If you are under age 18, please get a parent's permission before completing this survey.

|                                      |                                     |                                       |
|--------------------------------------|-------------------------------------|---------------------------------------|
| <input type="radio"/> Olives         | <input type="radio"/> Pretzels      | <input type="radio"/> Tacos           |
| <input type="radio"/> Nuts           | <input type="radio"/> Chicken       | <input type="radio"/> Hamburger       |
| <input type="radio"/> BBQ Ribs       | <input type="radio"/> French Fries  | <input type="radio"/> Gravy           |
| <input type="radio"/> Tortilla Chips | <input type="radio"/> Cheese        | <input type="radio"/> Cinnamon Rolls  |
| <input type="radio"/> Potato Chips   | <input type="radio"/> Peanut Butter | <input type="radio"/> Steak           |
| <input type="radio"/> Cheesecake     | <input type="radio"/> Coffee        | <input type="radio"/> Cola            |
| <input type="radio"/> Ice Cream      | <input type="radio"/> Pizza         | <input type="radio"/> Chocolate Candy |

Internet

# Principle #6

## Use Same Classification Questionnaire

- Create one powerful, comprehensive classification questionnaire applicable to ALL food categories
- Rationale ... can tell us a lot about the person ...just by itself (attitudes)
- Can also be used to divide people into subgroups (e.g. gender, age, income, whether managing or concerned about health conditions ...)

# Choose what is important in olives

*Choose '3 most important out of 12'*

|                  |     |
|------------------|-----|
| Taste            | 89% |
| Appearance       | 51% |
| Texture          | 33% |
| Aroma            | 29% |
| Mood             | 28% |
| Memories         | 14% |
| Brand            | 14% |
| Portion size     | 14% |
| Social situation | 8%  |
| Associations     | 4%  |
| Advertising      | 2%  |
| Packaging        | 2%  |



# Key Results

Table Olives

# Let's look at some data

## We're going to look at some 'utilities'

- How to understand what you will see
- Additive constant
  - Odds or number of participants out of 100 who would be interested in the idea of an olive .. Even without any other information
    - Norms 0-30; 30- 60; 60-90 (low, medium, high)
- Utilities
  - Percent of people who would be interested in the olive idea if the element were added to a concept
    - Norms >6 are good > 10 are great
    - Norms < 0 is poor, avoid

# How sensory descriptions perform

*Females more interested\*, but also more judgmental\*\**

|  | Tot | Mal | Fem |
|--|-----|-----|-----|
| Additive Constant (Basic interest)   | 36  | 24  | 39  |
| Meaty ripened olives ready to stick on your finger or pop in your mouth        | 9   | 11  | 8   |
| Whole black olives without the pits  | 7   | 8   | 7   |
| Green fleshy olives with that salty taste                                      | 6   | 8   | 5   |
| Fleshy, jumbo olives with the bitter, salty note                               | 4   | 7   | 3   |
| All sizes of green and black olives in olive oil with lots of herbs and spices | 2   | 6   | 0   |
| Medium size glistening olives with the briney taste of salt and garlic         | -1  | 5   | -3  |
| Cracked olives, a delicacy flavored with herbs, spices, and a tasty marinade   | -5  | 3   | -8  |
| Olive paste with lots of chopped olives  | -15 | -11 | -16 |
| Small dark wrinkled olives marinated with hot pepper flakes                    | -19 | -4  | -24 |

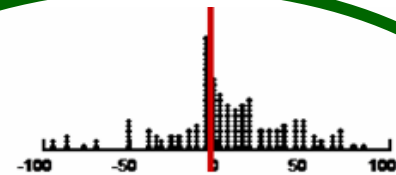
\* Higher additive constant ... but \*\* Lower utilities, and far more negative

# Let's look at individual variation

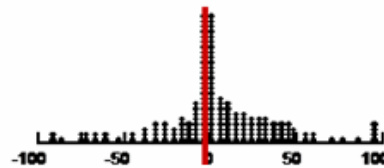
- Look at the utilities for the 9 flavor descriptions
- Question ... is there a normal distribution with lovers and haters?
- Or do some descriptions really turn off consumers
- Olive lovers (or at least those who select)
  - Generally like the black olives
  - But really divide on the hot, marinade, spicy olives

# Distribution of utility values

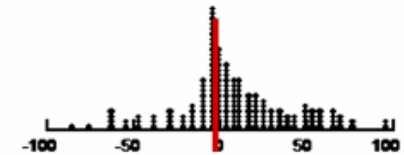
*Each graph is one of the 9 food descriptions*



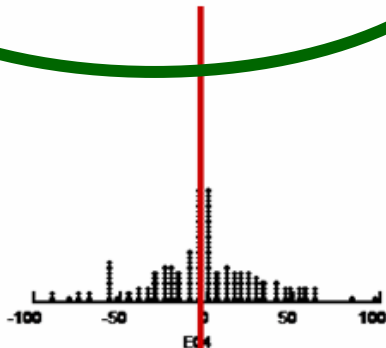
Whole black olives without the pits



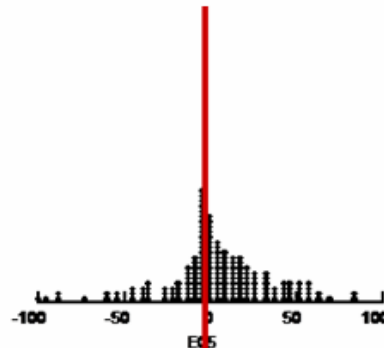
Green fleshy olives with that salty taste



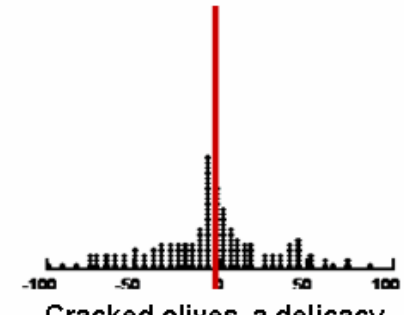
Meaty ripened olives ready to stick on your finger or pop in your mouth



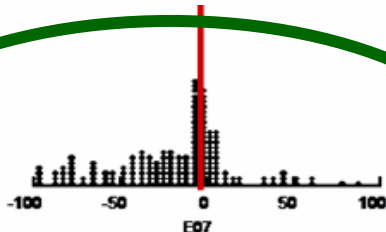
Medium size glistening olives with the briney taste of salt and garlic



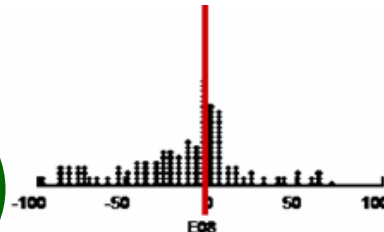
Fleshy, jumbo olives with the bitter, salty note



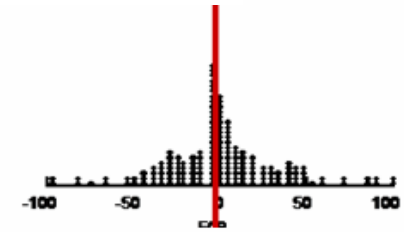
Cracked olives, a delicacy flavored with herbs, spices, and a tasty



Small dark wrinkled olives marinated with hot pepper flakes



Olive paste with lots of chopped olives



All sizes of green and black olives in olive oil with lots of herbs and spices

# What about 'attitudes' towards olives

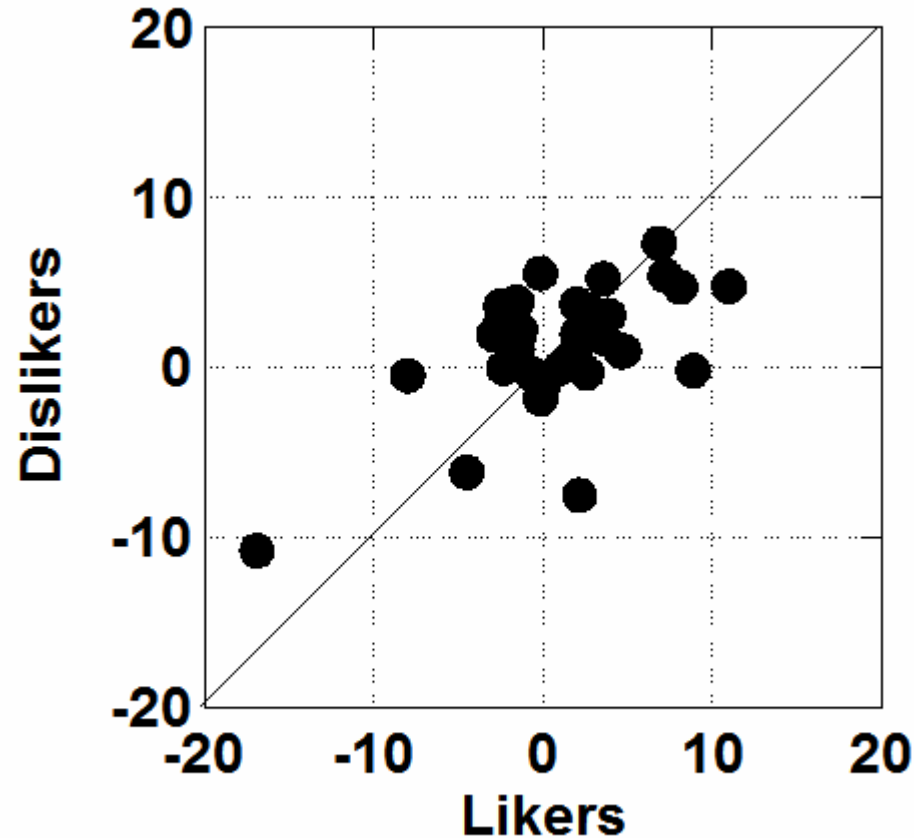
*Do likers and dislikers (by attitude) differ?*

- Ask people how much they like olives
  - Use the FACT scale (Schutz, 1965)
  - Eat every time offered to never eat
  - Mixes liking and frequency
- Most people like olives
  - That's why they chose to participate
- But dislikers and likers are similar in patterns
  - Not identical
  - But not radically different either

# Utilities for likers and dislikers

*All 36 elements for olives .. Pretty similar*

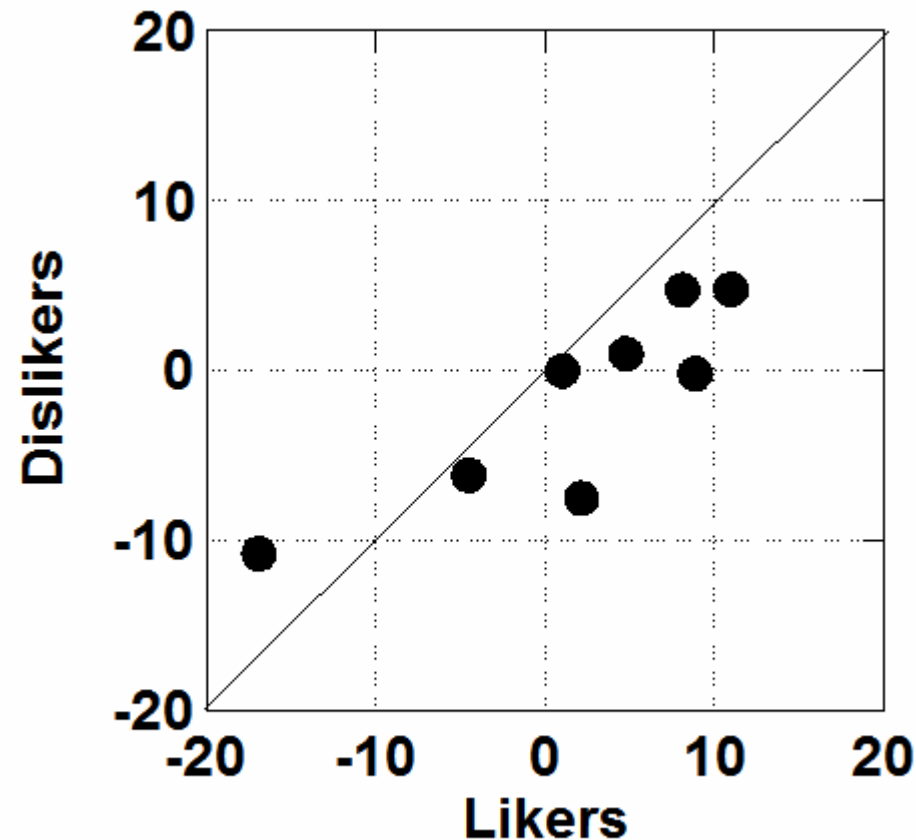
*Winners for both groups pretty similar*



# Food descriptions -- likers and dislikers

*Similar for the 9 'food descriptions' (silo #1)*

*Winners for likers are the same as for dislikers .. Just the numbers are different (likers always more positive)*





What about attitudes .. Again  
*Choose what sensory aspect is important  
(appearance, aroma, taste, texture)*

Let's look at people who say that sensory  
characteristics are important

People 'do know' what they like  
If they like appearance, they respond to appearance  
statements

# Do people know themselves

|   |    |
|---|----|
| <b>Appearance is important</b>  |    |
| Any size you want ... small, medium, large, jumbo ... you name it!                                      | 10 |
| Extra large and nicely salted ... with the stuffing you want ... garlic, pimentos, almonds ... whatever | 10 |
| <b>Aroma is important</b>   |    |
| Green fleshy olives with that salty taste   | 12 |
| Meaty ripened olives ready to stick on your finger or pop in your mouth                                 | 12 |
| Extra large and nicely salted ... with the stuffing you want ... garlic, pimentos, almonds ... whatever | 11 |
| <b>Texture is important</b>   |    |
| Meaty ripened olives ready to stick on your finger or pop in your mouth                                 | 14 |
| Green fleshy olives with that salty taste   | 14 |
| Extra large and nicely salted ... with the stuffing you want ... garlic, pimentos, almonds ... whatever | 13 |
| Whole black olives without the pits   | 12 |
| Any size you want ... small, medium, large, jumbo ... you name it!                                      | 10 |
| <b>Taste is important</b>   |    |
| Meaty ripened olives ready to stick on your finger or pop in your mouth                                 | 10 |

Some people said that '**mood**' is important

- So .. What elements scored well in the concepts
- For those who said 'mood is important' ..  
Nothing much really did well
  - Except real craving " you just have to have it'
  - It's about craving, desiring
- For those who didn't choose mood
  - It's about sensory pleasure

# Mood is important to some, not others

*What else is relevant to those who are influenced by mood?*

|   | Yes | No |
|---|-----|----|
| Additive constant ( basic interest)   | 39  | 34 |
| <b>Yes -- Mood is important</b>   |     |    |
| When you think about it, you have to have it ... and after you have it, you can't stop eating it        | 7   | 0  |
| Green fleshy olives with that salty taste   | 7   | 6  |
|   |     |    |
| <b>No -- Mood is not important</b>  |     |    |
| Meaty ripened olives ready to stick on your finger or pop in your mouth                                 | 5   | 11 |
| Extra large and nicely salted ... with the stuffing you want ... garlic, pimentos, almonds ... whatever | 3   | 8  |
| Whole black olives without the pits   | 5   | 8  |
| Any size you want ... small, medium, large, jumbo ... you name it!                                      | 5   | 7  |
| So good ... you practically have to lick your fingers & lips twice after each bite                      | -2  | 6  |
| Green fleshy olives with that salty taste   | 7   | 6  |

So it looks like we can find  
differences if we want

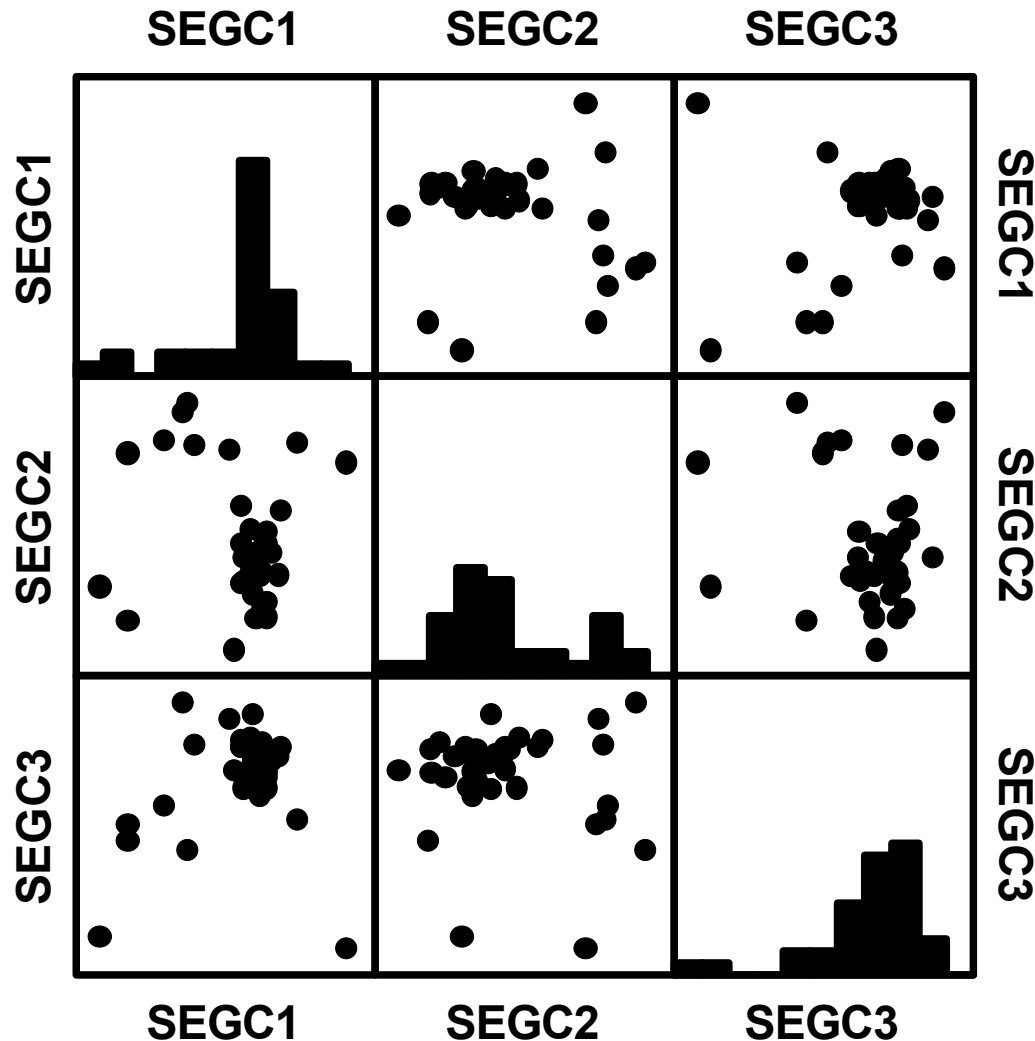
But what about really different groups  
Different 'olive mind-sets'

# The three segments

- We don't see very much difference between groups of people
  - Males versus females
  - Younger versus older
- Yes.. Of course there are some differences
  - But hard to explain
- How about groups with real differences in patterns
  - We have found these before
  - We look at the patterns of their utilities
- And we find three groups
  - Classics – like the traditional type of olive
  - Imaginers – talk about the situation
  - Elaborates – paint word pictures of product

# Segments are really distinct mindsets:

*What appeals to one segment does not appeal to the other two segments*



|   | Total | Classics | Elaborates | <u>Imaginers</u> |
|---|-------|----------|------------|------------------|
| <b>Base Size</b>  | 168   | 70       | 71         | 27               |
| <b>Constant</b>   | 36    | 44       | 22         | 50               |
| <b>Segment #1 (“Classics”)</b>  |       |          |            |                  |
| Whole black olives without the pits   | 7     | 18       | 15         | -42              |
| Meaty ripened olives ready to stick on your finger or pop in your mouth                                 | 9     | 8        | 18         | -12              |
| <b>Segment #3 (“Imaginers”)</b>   |       |          |            |                  |
| Green fleshy olives with that salty taste   | 6     | -13      | 22         | 15               |
| From your favorite grocery store  | 3     | 0        | 3          | 12               |
| Extra large and nicely salted ... with the stuffing you want ... garlic, pimentos, almonds ... whatever | 7     | -5       | 17         | 11               |



|   | Total | Classics | Elaborates | <u>Imag-<br/>iners</u> |
|---|-------|----------|------------|------------------------|
| <b>Base Size</b>  | 168   | 70       | 71         | 27                     |
| <b>Constant</b>   | 36    | 44       | 22         | 50                     |
| <b>Segment #2 (“Elaborates”)</b>  |       |          |            |                        |
| All sizes of green and black olives in olive oil with lots of herbs and spices                          | 2     | -12      | 23         | -20                    |
| Green fleshy olives with that salty taste   | 6     | -13      | 22         | 15                     |
| Medium size glistening olives with the briny taste of salt and garlic                                   | -1    | -17      | 18         | -9                     |
| Meaty ripened olives ready to stick on your finger or pop in your mouth                                 | 9     | 8        | 18         | -12                    |
| Fleshy, jumbo olives with the bitter, salty note  | 4     | -11      | 18         | 5                      |
| Extra large and nicely salted ... with the stuffing you want ... garlic, pimentos, almonds ... whatever | 7     | -5       | 17         | 11                     |
| Cracked olives, a delicacy flavored with herbs, spices, and a tasty marinade                            | -5    | -24      | 17         | -13                    |
| Whole black olives without the pits   | 7     | 18       | 15         | -42                    |
| Premium quality ... that great classic taste ... like it used to be                                     | 4     | -2       | 10         | 6                      |