

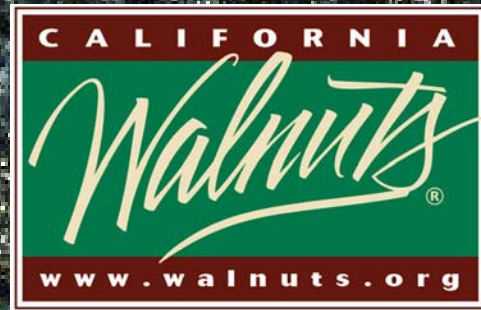


Annual Report ***2007/08***

***California Walnut Board &
California Walnut Commission***

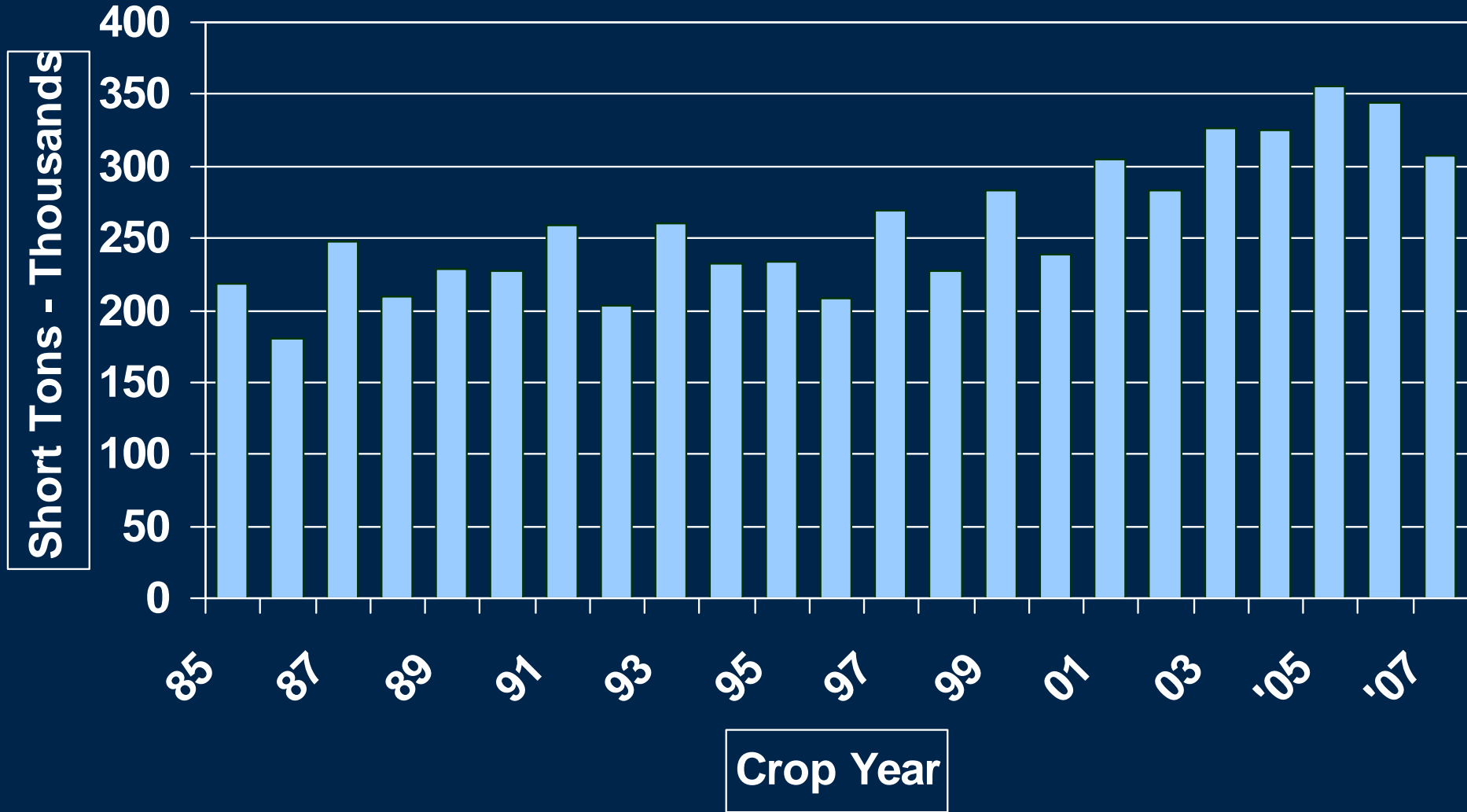
Responsibilities and Activities

- **Market Development**
- **Research**
 - Health,
 - Production
 - Market Research
- **Regulatory Matters**
- **Trade Policy Issues**
- **Serve the Industry**

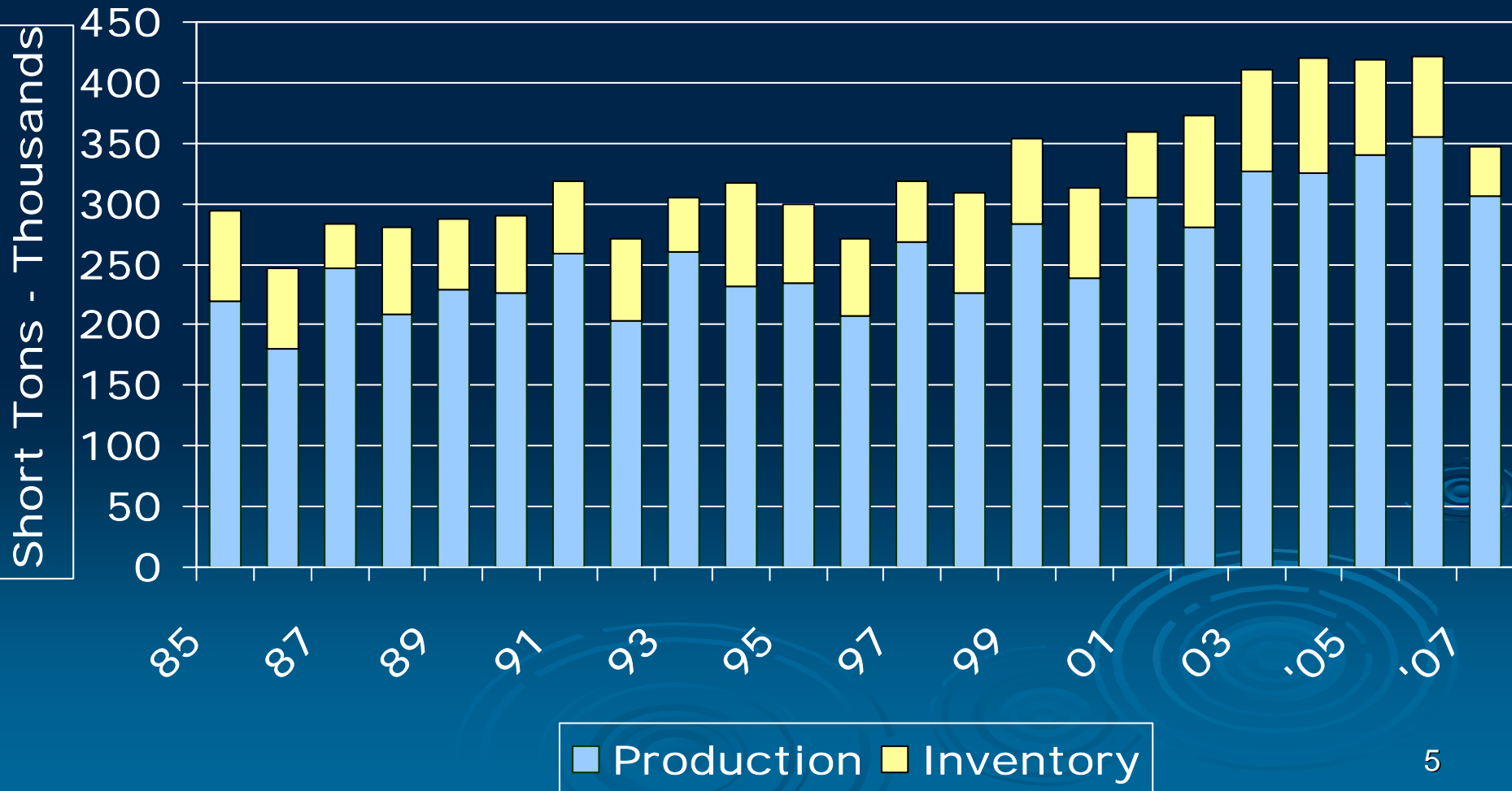


Production

U.S. Walnut Production History

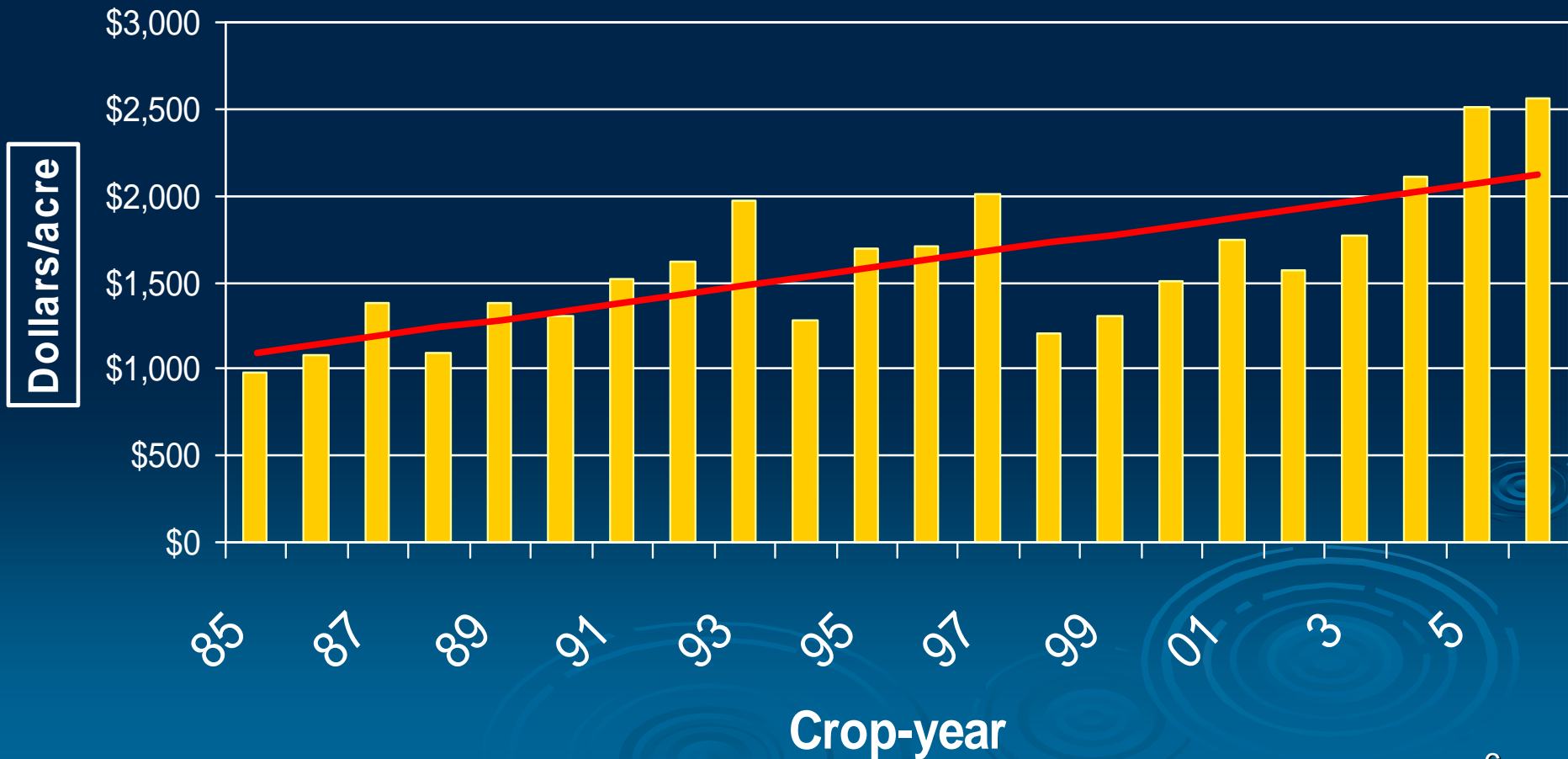


Total California Walnut Availability



Higher Return with Large Crops

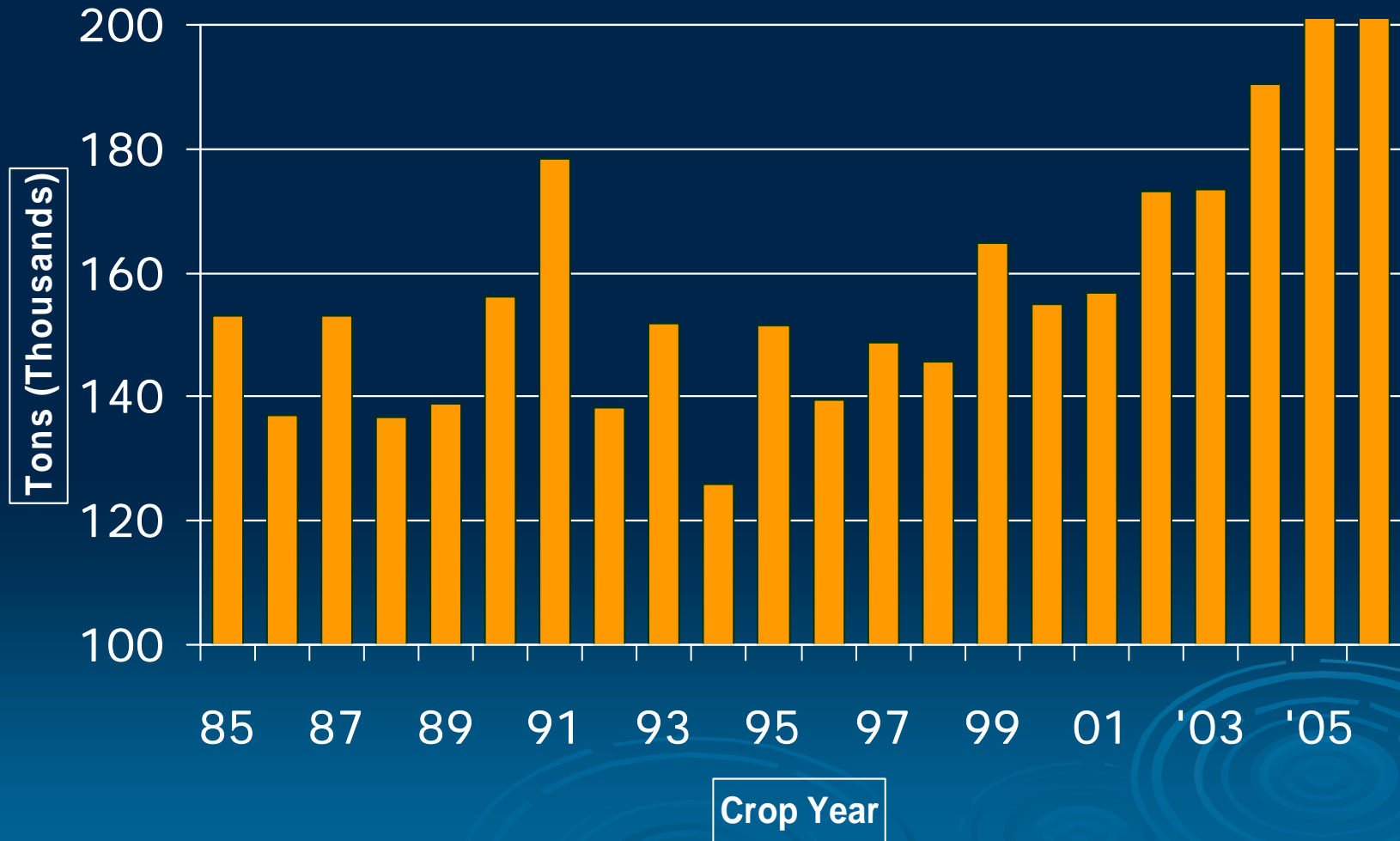
Average Revenue/Acre 1985/2002



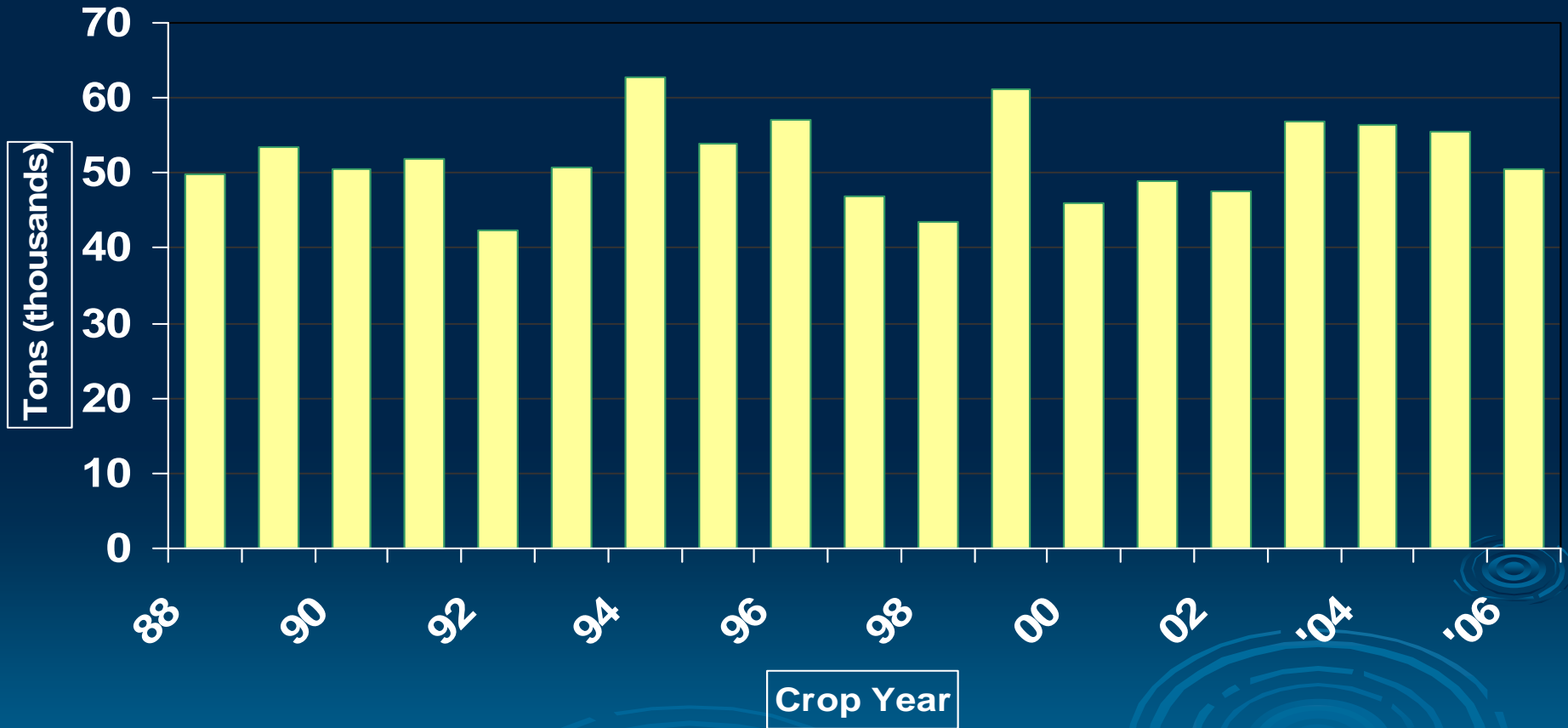
Shipments



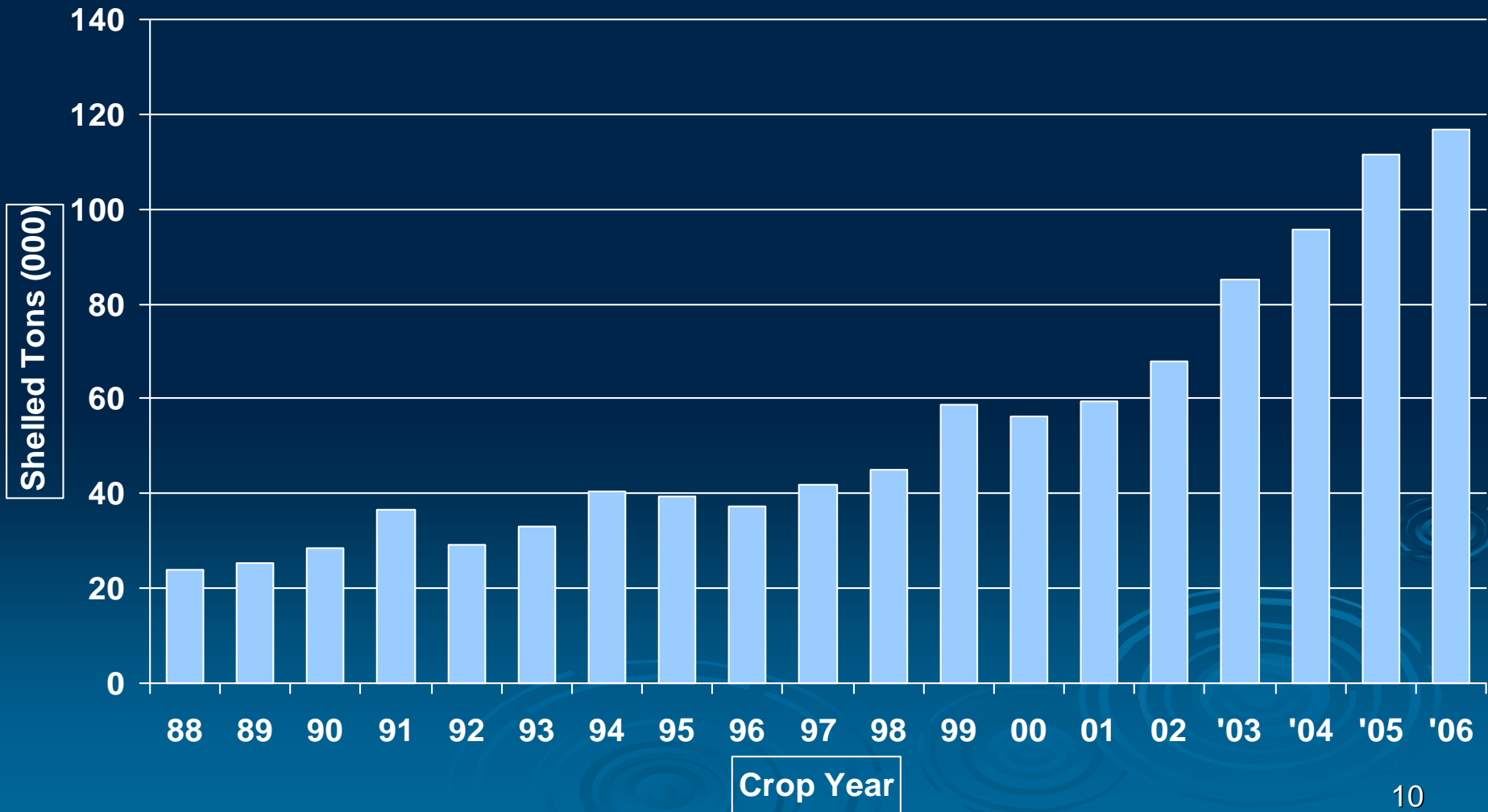
Total USA Shipment History



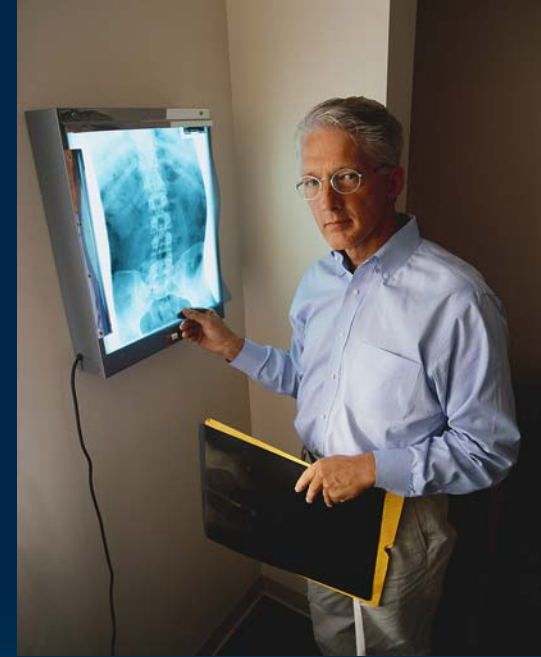
Inshell Walnut Exports



Shelled Walnut Exports Inshell Equivalent Tons



Walnut Health Research



Health Research Program History

“In a Nutshell”

- ♥ First study 1992
- ♥ Focus on Heart Health
- ♥ Now have 17 published studies in many areas
 - ♥ Expanding into even more areas
 - ♥ Health research supports walnut consumption messaging

Assessing Media Value of PENDING PUBLICATIONS





Moderate to High Media Value

Suppression of implanted MDA-MB 231 human breast cancer growth in nude mice by dietary walnut

- W. Elaine Hardman, PhD
Marshall University School of Medicine
- Co-funded by American Institute for Cancer Research
- Walnut diet **significantly** reduced rate of implanted tumor growth in mice.
- Accepted to *Nutrition and Cancer: An International Journal*...should publish by June 2008



Moderate Media Value

Effects of Omega-3s from Walnuts on Endothelial Function and Blood Pressure in Subjects with Hypercholesterolemia

- Sheila West, PhD, Penn State University
- Walnut diet significantly reduced diastolic blood pressure and flow mediated dilation increased
These results suggest novel mechanisms for the cardioprotective effects foods containing omega-6 and omega-3 fatty acids.
- Expect publication in 2008



Low Media Value

The Effect of Walnut Intake on Factors Related to Prostate and Vascular Health in Older Men

- Terry Hartman, PhD, Penn State University
- Submitted to *Nutrition Journal* (an online journal)
- Study suggest that walnuts may improve biomarkers of prostate and vascular status. alpha-tocopherol: gamma tocopherol ratio
- Much Debate



HIGH Media Value

Effects of Walnuts on Motor and Cognitive Function in Aging

- Dr. James Joseph, Tufts University
- Abstract received excellent press coverage at Neuroscience meeting in November
- Diets containing 2%, 6%, or 9% walnuts when given to old rats, were able to reverse several parameters of brain aging, as well as age related motor and cognitive deficits



High Media Value

Including Walnuts in Low Fat Dietary Advice Offers Metabolic Advantages for People with Type 2 Diabetes

- Dr. Linda Tapsell, University of Wollongong, Australia
- Subjects sustained weight loss, showed marked improvements in various clinical parameters Study promotes whole food approach and emphasizes importance of PUFA in DM diet
- May submit to *New England Journal of Medicine*

9 New Studies Underway!

- Cancer Treatment
- Diabetes
- Heart Disease
- Body Weight
- Effects on Pregnancy
- Aging
- Metabolic Syndrome
- Antioxidant Capacity
- Mind/Brain Function

4 Studies Just Funded

- Various forms of Cancer
- The Whole Walnut versus the Components of Walnuts



Marketing Highlights - 2007



P.R. Program Efficiency

<u>Market</u>	<u>Impressions (in millions)</u>	<u>CPM</u>
Canada	57.3	.19
Germany	83.7	.23
Japan	1,117.	.25
Korea	301.	.24
Spain	82.3	.22
U.S.A.	2,837.	.33

U.S.A.

U.S. Public Relations

2006/07 Highlights

- **Influenced Key Opinion Leaders**
 - Michael Roizen, MD
 - Mehmet Oz, MD
 - Andrew Weil, MD
 - Bob Greene
 - Joy Bauer, MS, RD (Today Show)
- **Credibility = News**
- **Internet Popularity**



“You” Tour – Summer Event

- **Drs. Oz and Roizen** host events in 5 cities reaching thousands
- Focus on nutrition & health
- Walnuts, **nutrition** brochures and giveaways used at all events
- Created 1 on 1 interviews with consumers - used on the **CWC website**



Health Professionals

- New Web Based Interactive CE Module
- Attendance at Trade Shows
 - SNA
 - ADA
 - AANP
 - American Dietetic Assoc. (FNCE)
 - CIA



Martha Stewart-BODY+SOUL



whole living | **body+soul** GOOD NEWS ABOUT STRESS

Take Back Your Time!
Overbooked? Overwhelmed?
Set yourself free

Save \$1400 This Year
Easy home energy conservation tips

Dinner With Dr. Andy Weil
A special meal with the health pioneer

Amazing Eco-Adventures
Escapes from Bolivia to Bhutan

Emotional Eating
Why we do it, how to stop

Heart Health Alert
Our must-have guide to natural prevention

Walnuts
by Cheryl Redmond | recipes by Sandra Gluck

Eating fish isn't the only way to get healthy omega-3s. These nourishing nuts are another super source.

Depending on how you split a walnut in its shell, the nut resembles either a heart or a brain – and how apt, since these nuts do wonders for both.

Health Benefits: While walnuts boast heart health (all the most nuts, they have an added edge. Most nut oil is monounsaturated, but walnuts primarily contain the polyunsaturated variety. In fact, they're the only nut – and one of

NOT YOUR AVERAGE NUT
Loaded with vitamins E and
glut, for you fats, walnuts are
a health nut's dream.

photographs by Rita Mann

“In a nutshell: Loaded with omega-3s, antioxidants, and other disease-fighting nutrients, walnuts protect the heart and promote brain functioning.”

October 2006

Canada

Canada

Trade mission included:

- Formal trade receptions
- Media event
- Photo ops at grocery stores

In-store demos featured:

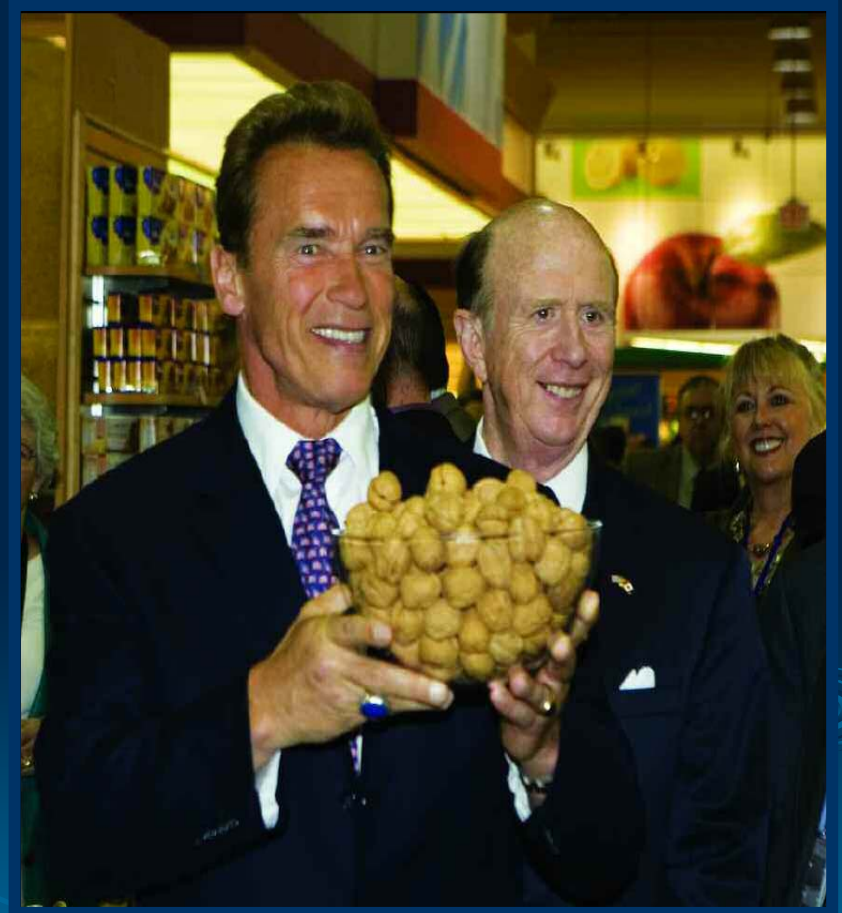
- Chopped Walnuts and Grapes on Crackers Spread with Light Cream Cheese
- Fresh Fig with Proscuitto, Gorgonzola with a Walnut Half.

Total media impressions:

3,476,500

Total editorial value:

\$89,460



Canada

NDPC – February 18-20, 2007
Canadian/International Food & Beverage Show

Winning Products:

- **Walnut and Fudge Crunch**
- **California Walnut Apple Breakfast Bread**
- **Walnut Caramel Pear Cake**
- **Walnut Crunch**
- **Muesli Multigrain Cereal**
- **California Walnut Stuffed Pasta with Fig and Prosciutto**
 - **Total media impressions:**
 - **4,649,851**
 - **Total editorial value:**
 - **\$203,232**



Germany

Germany

- Cooperation with Rewe, Germany's 3rd largest grocery retailer
- Walnuts featured in their annual 2008 calendar distributed to employees and customers.
- The April spread contains recipes & photos

PUTENSPIESS MIT CURRY-LIMETTEN-DIP
FÜR 4 PORTIEN
Rezepte: 2008/04/01
007 (www.rewe.de) © Rewe Markt GmbH

FÜR DIE PUTENBRUST:

- 400 g Putenschnitzel
- je 1 Stk rote, gelbe und grüne Paprika in Streifen
- 100 g rote Kirschtomaten
- 2 Schalotten
- wenige Lorbeerblätter
- 2 EL Öl
- Salz, grober Pfeffer aus der Mühle

FÜR DEN CURRY-LIMETTEN-DIP:

- 80 g kalifornische Walnüsse
- 250 g Joghurt
- Sulfonien 1 Limette und 1/2 Limette in Scheiben
- 1 EL Curry
- 1/2 TL Ahornsirup
- 1/4 Bund Koriander
- Salz, Pfeffer aus der Mühle

FEIGEN UND WALNUSS-AMUSE-BOUCHE
FÜR 4 PORTIEN
Rezepte: 2008/04/01
002 (www.rewe.de) © Rewe Markt GmbH

- 100 g kalifornische Walnüsse (30 Stück)
- 8 Feigen
- 4 TL Balsamicoessig
- 16 Schokier Parmaschinken, dünn geschnitten (ca. 125 g)
- 100 g Bergkresse

WALNUSS-OBSTSUPPE
FÜR 4 PORTIEN
Rezepte: 2008/04/01/01 (www.rewe.de) © Rewe Markt GmbH

- 2 Orangen
- 250 g grüne Wirsingstücken
- 250 g blaue Wirsingstücken
- 200 g Hirsenkörner
- 50 g kalifornische Walnüsse
- 200 g Quark
- 8 EL Weizenkleie
- 2 EL Zitronensaft
- 200 g Orangensaft
- 4 EL Honig
- 1 Eiweiß

TIPP: Die Obst- oder saure Feigen sind bei Zimmertemperatur im Kühlschrank vor ein bis zwei Tagen nach. Achtung! Sie auf eine weiche Unterlage. Ein bis zwei Tage können auch frische Feigen aufbewahrt werden. Unbedingt in den Kühlschrank lagern!

1 Putenschnitzel in mundgerechte Würfel schneiden. Paprikascheiben portionieren, in Stücke schneiden. Tomaten in Würfel schneiden, Kirschtomaten in Scheiben schneiden. Vorkochreife Zitronen- und Lorbeerblätter auf 1/2 cm dicke Scheiben schneiden.

2 Öl in Pfanne aus der Mühle erhitzen. Spieße damit anbraten, in eine Grillbox mit Grillrost setzen. 12-15 Minuten braten, dabei häufig wenden.

3 Für den Curry-Limetten-Dip kalifornische Walnüsse ohne Fettsäuren in einem Mixer oder in einem Mixer fein hacken lassen. Joghurt mit Limettensaft, Curry und dem Walnussöl vermischen. Mit Salz, Pfeffer und Ahornsirup abschmecken. Koriander fein hacken, trocken-schmeckende Bitterchen zum Hacken. Unter den Dip führen. Dip in den Putenspiessen servieren.

1 Walnüsse ohne Haut portionieren in einer Pfanne erhitzen. Zum Auskühlen auf einen Teller abheben.

2 Feigen abspülen, trocken tupfen und in Scheiben schneiden. Feigenhälften mit Balsamicoessig beträufeln. Parmaschinken in Scheiben schneiden und heiß auf einer Teller verteilen. Die Feigen mit dem Honig und Bergkresse darauf servieren.

3 Orangensaft in einem Mixer fein hacken und durch ein Sieb geben. Auf gelben Feigen servieren und Walnussöl darüber geben.

1 Das Eiweiß steifen.

2 Walnüsse ohne Haut portionieren in einer Pfanne erhitzen.

3 Quark mit Weizenkleie, Zitronensaft, Orangensaft und dem Eiweiß Honig vermischen.

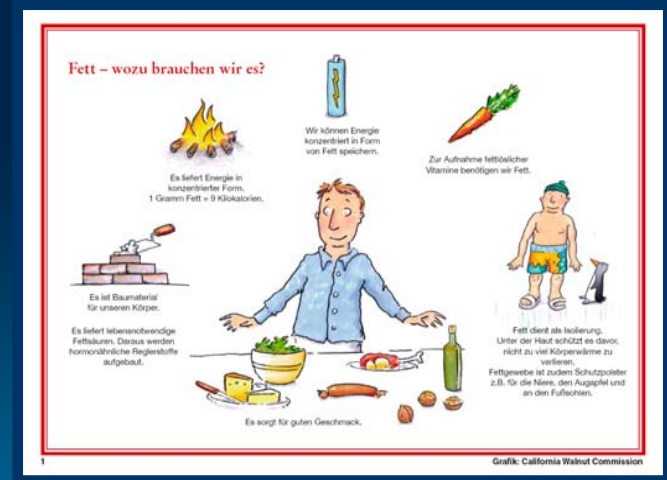
4 Eiweiß mit einem EL Honig vermischt auf den Zitronensaft geben. Die Orangensaft servieren.

5 Obst in einem Teller verteilen, Quarkessig darüber geben, mit Walnüssen garnieren.

Germany

Nutrition Charts

- Developed a set of 12 nutrition charts explaining the effects of the different fatty acids on your body, the right use of fat and the opportunities of the omega 3 fatty acids California walnuts offer.
- Target groups are dietitians, nutritionists and other health professionals who need good, simple material to advise their patients.



Germany

Business Class Promotion with Lufthansa.

- “Taste the World”, they featured California six months long in weekly rotating rhythms.
- “Taste California” guide featured California walnuts.
- Circulation of 50,000 distributed by flight attendants in European flights (longer than 150 minutes).

 Lufthansa Business Class



Taste California!

Menu

Korea

Most Recommended Food For (Korea) SAT Students



Abalone



Broccoli



Seaweed

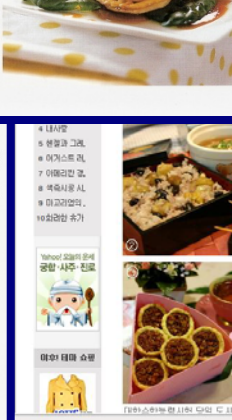
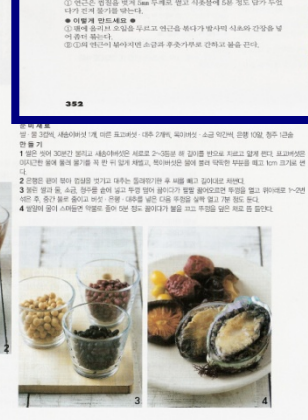
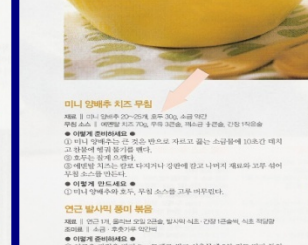


Walnut

Energize Your Brain With Walnut!



목수수계산수부
현미죽
비섯대탕



비섯대사이다

비섯대 100g, 사과 1개, 레몬즙 1큰술, 꿀 1큰술, 물 1리터

만들기

- 비섯대를 잘 씻고, 사과도 잘 씻고, 레몬즙과 꿀을 넣어 믹서기에 갈아준다.
- 물 1리터를 넣고, 레몬즙과 꿀을 넣어 잘 섞어준다.
- 믹서기에 갈아준다.
- 믹서기에 갈아준 비섯대사이다를 냉장고에 넣어 보관한다.

효과

- 비섯대에는 비타민 C가 풍부하여 면역력을 높여준다.
- 비섯대에는 칼륨이 풍부하여 혈압을 낮춰준다.
- 비섯대에는 섬유질이 풍부하여 장 건강을 도와준다.
- 비섯대에는 폴리페놀 성분이 풍부하여 노화를 방지해준다.

행여기두만집

행여기 100g, 두부 100g, 김 1장, 참깨 1큰술, 물 1리터

만들기

- 행여기를 잘 씻고, 두부도 잘 씻고, 김도 잘 씻고, 참깨도 잘 갈아준다.
- 물 1리터를 넣고, 행여기, 두부, 김, 참깨를 넣어 잘 섞어준다.
- 믹서기에 갈아준다.
- 믹서기에 갈아준 행여기두만집을 냉장고에 넣어 보관한다.

효과

- 행여기에는 비타민 C가 풍부하여 면역력을 높여준다.
- 두부에는 칼슘이 풍부하여 뼈 건강을 도와준다.
- 김에는 요오드가 풍부하여 갑상선 건강을 도와준다.
- 참깨에는 칼슘이 풍부하여 뼈 건강을 도와준다.

Incredible India

영양제 광고

영양제 100g, 물 1리터

만들기

- 영양제를 잘 씻고, 물도 잘 씻고, 참깨도 잘 갈아준다.
- 물 1리터를 넣고, 영양제, 물, 참깨를 넣어 잘 섞어준다.
- 믹서기에 갈아준다.
- 믹서기에 갈아준 영양제를 냉장고에 넣어 보관한다.

효과

- 영양제에는 비타민 C가 풍부하여 면역력을 높여준다.
- 물에는 칼슘이 풍부하여 뼈 건강을 도와준다.
- 참깨에는 칼슘이 풍부하여 뼈 건강을 도와준다.

비섯대사이다

비섯대 100g, 사과 1개, 레몬즙 1큰술, 꿀 1큰술, 물 1리터

만들기

- 비섯대를 잘 씻고, 사과도 잘 씻고, 레몬즙과 꿀을 넣어 믹서기에 갈아준다.
- 물 1리터를 넣고, 레몬즙과 꿀을 넣어 잘 섞어준다.
- 믹서기에 갈아준다.
- 믹서기에 갈아준 비섯대사이다를 냉장고에 넣어 보관한다.

효과

- 비섯대에는 비타민 C가 풍부하여 면역력을 높여준다.
- 비섯대에는 칼륨이 풍부하여 혈압을 낮춰준다.
- 비섯대에는 섬유질이 풍부하여 장 건강을 도와준다.
- 비섯대에는 폴리페놀 성분이 풍부하여 노화를 방지해준다.

Korea

In-shell Walnut Market Opening

- Total 1.6 million pounds of in-shell walnuts were imported



Korea

New Products using walnuts



Pulmuone
Salad Dressing



Pulmuone
A Cup of Morning



Samlip
Walnut Mini Me Bread



Sempio
Ziller Cacao Walnut



Japan

Japan

➤ Tie-in with KUME Natto

- Traditional Health Food
- Soy based for daily consumption
- Some areas combine Natto & walnuts
- **KUME is the 3rd largest Natto Marketer**
 - Intro included in-store promotion and media
 - KUME plans to launch another walnut item



Japan

Collaboration menus and packaging with recipes



Tie-in promotion with Dotour



ナッツは太ると思われがちだけど...
実は栄養ぎっしりの良質な健康食です。



メープルくるみラテ
¥300



くるみとチョコのケーキ
¥360



くるみとチキンのサンドイッチ
¥280



メープルナッツ
¥140



蔗キャラメルとくるみのマフィン
¥160



くるみのブラウニー
¥180



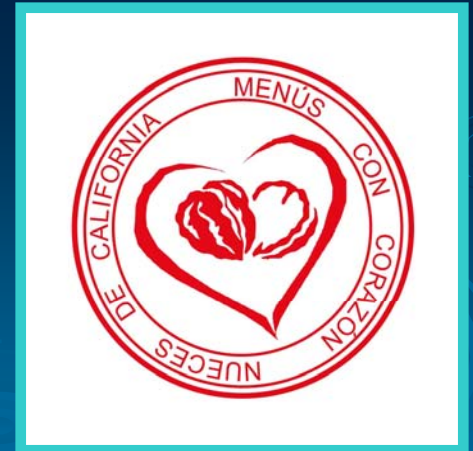
Spain

Spain

Menu with Heart campaign

- **We organized 5 press conferences in the main Spanish cities to present the recipe booklets developed for famous cooks and renowned cardiologists to promote a cardio-healthy diet and to remind the population of the health benefits of walnuts:**

- **Barcelona- 16th of May**
- **Bilbao- 22nd of May**
- **Valencia- 7th of June**
- **Madrid- 12nd of June**
- **Marbella-13th of June**



Spain

Menus with Heart campaign

- Barcelona-Restaurant Caelis- The best restaurant in Catalonia 2006.



- Bilbao: Etxanobe restaurant- 1 Michelin star



Production & Post-Harvest Research

- 2007/08 Budget \$650,000
- Address the needs of the Growers
 - Orchard/Water management
 - Varietals Development
 - Entomology
 - Plant Pathology/Nematology
 - Post Harvest Issues

A Few PPHR Priorities

➤ New Varieties

- Flower late
- Harvest Early
- High Meat Yield
- Light Color



➤ Root Stock Diversity

- Disease Resistance

➤ Reduced Pesticide Use

Regulatory and Trade Policy Activities



Trade Policy

- In-shell Access to Korea.
- The Free Trade Agreement with Korea will reduce duty from 30% to 0% in five years once passed by Congress.
- WTO stalled
- Japan will lower duty but only within a WTO agreement

Regulatory Issues

- Continued negotiation on UN/ECE standards.
- Critical Use Exemption (CUE) for methyl bromide.
- Support broader specialty crop provisions in Farm Bill.
- Monitor and comment on Minimum Residue Levels (MRL's) country by country.



California Walnuts

Your Best source of Omega-3

