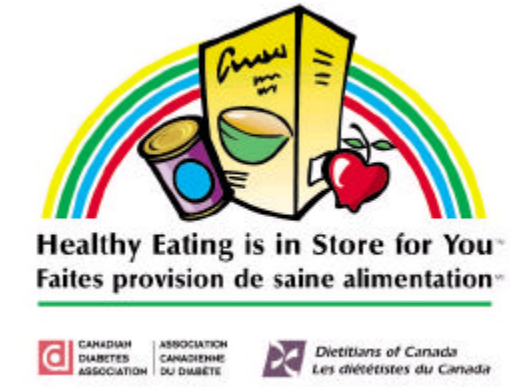

Healthy Eating Is In Store For You™

Environmental Scan of Nutrition Label Education Tools

August 28 2001

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The Canadian Diabetes Association and Dietitians of Canada wish to acknowledge the work in completing this scan of Elaine De Grandpré RD, and Amy Farrier RD, University of Toronto MHSc candidates.

This research and report was completed for the Healthy Eating Is In Store For You™ project.

Table of Contents

"Healthy Eating Is In Store For You"™

Environmental Scan of Nutrition Label Education Tools

I. BACKGROUND

A. Nutrition Labelling Education Overview

It is apparent through ongoing consumer research that Canadians are demanding more information about the foods they buy (NIN, 1999). One way consumers obtain information is by reading food labels in the marketplace. Since nutrition labels are perceived as an important method of accessing nutrition information, consumers must be able to understand the label and apply it to making healthy food choices (NIN, 1997). Effective consumer education is an important factor in achieving that goal (NIN:Rapport,1999).

As Canada moves toward a mandatory labelling system, it is important to consider the best methods of educating consumers about food labels. Research has shown that Canadians have difficulty understanding food labels: one survey conducted by the National Institute of Nutrition found that Canadians age 55-70 years, and individuals with lower education levels, found the ingredient list and panel on food labels difficult to understand (NIN, 1997).

These target groups, among others, will be included in the Nutrition Labelling Education Strategy *Healthy Eating Is In Store For You*™ (HESY). By examining existing educational resources and understanding the complexities and challenges involved in label reading, clinicians can extrapolate ideas and modify them to better educate Canadians in the future.

B. Challenges for Effective Label Education

An effective label education strategy must address the challenges of reaching a diverse audience, overcoming messaging inconsistencies, and providing information at an appropriate literacy level.

1. Diverse Audience

A considerable challenge encountered in the United States regarding nutrition labeling education is the diverse audience (Kulakow, 2001). A similar challenge exists in Canada, with its tremendous diversities of culture and language. Thus, it is difficult to develop an educational tool that meets the needs of everyone (Kessler, 1999).

A further challenge lies in addressing the two types of knowledge required for consumers to use nutrition labels: declarative and procedural knowledge. Declarative knowledge requires that a person has knowledge of something (e.g. a certain food contains fibre). Procedural knowledge compels an individual to apply what they know in practice (e.g. incorporating high-fibre food into their diet) (Gagne, 1993).

In the early 1990s, the Food and Drug Administration (FDA) tried several methods of consumer education regarding labelling, with little success (Kulakow, 2001). Ineffective methods included radio and television public service announcement, live theatre skits, cartoons and written materials. A more successful tool, according to Naomi Kulakow, Center For Food Safety and Applied Nutrition, was a video on food labelling entitled *The Food Label and You: Check it Out*. Kulakow felt that consumers were successful at understanding labels through this video because it was short, contained key messages, used colour, was accompanied by written material for reinforcement, and was interactive. This tool was considered effective for people as young as 15 and for elderly viewers.

2. Inconsistent Messages

Another difficulty regarding label reading is inconsistent messaging due to the ambiguity of Canadian regulations regarding labelling. Consumers require consistent messages to help them make informed food choices (Diet Guidelines Alliance, 1996), and become frustrated when they are unable to compare products in the marketplace (Dietitians of Canada, 1998).

In order to meet these challenges, it is necessary to provide accurate, simple messages to consumers in a variety of forms to meet the needs of Canada's diverse population (Health Canada, 1999a,b). Future policy changes regarding mandatory labelling will help alleviate this problem, as consumers will see more consistency in the marketplace.

3. Low Literacy

Recent findings indicate that nearly half of Canadians have difficulty with everyday reading skills (Statistics Canada, 1996). Low literacy among Canadians is a direct barrier to effective education, and an indirect barrier to good health (Health Canada, 2000). Literacy involves both comprehension and understanding of materials (Health Canada, 2000), however, although a person can acquire information, they may be unable to make use of that information (Gagne, 1993). This disparity between declarative and procedural knowledge may be one of the most difficult obstacles to educating low-literacy consumers.

A US study conducted by the FDA that explored how consumers used food labels indicated that people could compare products and choose one that contained less of a particular nutrient, but had difficulty using this information to plan a diet (Levy,1998). Another American study determined that most written educational material from government, academic, professional and health agencies is written at a grade nine level or higher. This is above the literacy level for the average consumer (Hartman et al,1994). When working with low-literacy consumers it has been suggested that other communication vehicles besides written materials should be used, such as videos or slide presentations (Morris, 1994; Statistics Canada, 1996).

C. Federal Government Directions

1. Mandatory Labelling

For effective dissemination of consumer material, consistent messaging is crucial (Dietary Guidelines Alliance, 1996). However, as a result of voluntary labelling, Canadians are uncertain about choosing among products because of labelling inconsistencies. Other countries, including the US, have already implemented mandatory labelling (FDA, 1990), so many Canadians have been exposed to products with nutrition information since 1994. As Canada moves towards mandatory product labelling, there must be consistency in the messages consumers are given when pertaining to the use, significance and purpose of labels on Canadian-made products (Contendo, 1995).

2. National Diabetes Strategy

In November 1999, Health Minister Allan Rock announced a $115 million allotment for the *Canadian Diabetes Strategy*. This money is targeted for programs and strategies thwart the onset of diabetes, one of the fastest-growing, preventable diseases in Canada. Ongoing support through Health Canada allows government, industry and non-profit organizations to work together to improve Canadians' health.

Over the last few years, Canadian healthcare professionals and the public alike have asked government for mandatory regulations and increased product nutritional information (Health Canada, 1999). "Improve the usefulness of nutrition labelling, increase its availability and broaden public education" were key points included in Nutrition for Health: An Agenda for Action (Joint Steering Committee, 1996). The proposed labelling guidelines presented by Health Canada in 2000 look promising, as many of the components address the public's opinion of what should be included on the labels.

"Gazette 1: Regulations Amending the Food & Drug Regulations (Nutrition Labelling, Nutrition Claims, and Health Claims)" was published on June 16, 2001. Currently, Health Canada is awaiting comments and suggestions from the community to the proposed regulations and expects to publish a final version (Gazette 2) in March 2002. *Figure 1* shows a history of nutrition labelling policy in Canada.

3. Label Format

The content and format of product labelling has been shown to influence consumer understanding and application (NIN,1997). Several studies have examined the perceptions and preferences of Canadian consumers to determine if there is consensus regarding the appearance and content of labels (NIN,1998). The label proposed by Health Canada is similar in nature to the existing US label, which could make many aspects of mandatory labelling simpler, from both a consumer education and industry standpoint. However, some support a uniquely Canadian label, as opposed to adopting the U.S. model (NIN,1997).

The nutrition facts labelling information as proposed in Gazette 1 should include, at a minimum:

- Serving size
- Calories
- Fat (saturated and trans fat, and % daily value)
- Cholesterol
- Sodium and % daily value
- Carbohydrates and % daily value
- Fiber and % daily value
- Sugars
- Protein
- Vitamins A and C, calcium and iron (with % daily value for each)

Samples of the proposed "Standard Format" and "Standard Format + Additional Information" for product labelling can be found in Appendices 2 and 3 or on pages 2128 and 2136 of the Gazette 1 document (available online at www.hc-sc.gc.ca).

In Gazette 1, 42 nutrient claims and 5 health claims are proposed and can be found in Appendices 4 and 5 of this report or on pages 2094-2122 of the original document.

II. ENVIRONMENTAL SCAN: AN OVERVIEW

A. Purpose of the Environmental Scan

1. To examine existing tools and resources available for consumers and educators regarding label reading education in Canada and other countries (specifically those with mandatory labelling).
2. To develop an updated inventory list of label-reading education resources for consumers and educators.
3. To determine future undertakings for the Nutrition Labelling Education Strategy "Healthy Eating Is In Store For You"™ (a joint project of The Canadian Diabetes Association and Dietitians of Canada).

B. Target Audiences for "Healthy Eating is in Store for You"

For the purpose of "Healthy Eating is in Store for You"™ the main target groups are:

- *Women with families*. This population comprises a large portion of consumers who read food labels and do grocery shopping (NIN, 1997).
- *Individuals with low income and low literacy levels* who do not have readily available knowledge or access to other modes of education regarding health issues (Health Canada, 2000).
- Any *disease risk group* (those who currently have a disease or are at risk of developing an illness that may require label-reading skills for management).
- Intermediary target audiences include *community health leaders* (dietitians, diabetes educators, home economists, public health nurses, recreational and fitness leaders) and grocery retailers and manufacturers. These groups greatly enhance consumers' understanding and application of nutrition labelling (ADA, 1994).

C. Methods

Many key informants from The Food and Drug Administration (FDA), Health Canada, Dietitians of Canada, international dietetic associations, key international government contacts and other related organizations were contacted and questioned regarding their method of label education. Literature searches were conducted internationally in order to tap into a larger pool of information. Many organizations in Canada and the US were sent material for evaluation.

Educators within Canada were also encouraged to send materials and reports of activities they currently use for label education. Specifically, in June/July 2001, members of Dietitians of Canada received a request to share labelling education material via their regular e-journal. Diabetes educators in Canada were contacted via the CDA newsletter *Diabetes Quarterly*.

III. RESULTS OF ENVIRONMENTAL SCAN

A. Nutrition Labelling Education Tools

1. Categories of Tools/Resources

Various materials for the dissemination of nutrition information were discovered as the environmental scan was conducted, many of which were relevant to the above-mentioned target audiences. The most common types of materials were:

- Videos
- Handouts/pamphlets
- Book chapters
- Information on the world wide web
- Point-of-purchase symbols

2. Criteria for Resource Evaluation

In order for material to be included within the environmental scan, it must be appropriate for at least one of the above target audiences, and/or have the potential for adaptation to other segments. Another stipulation was that the materials must be currently available to consumers and educators.

In Part Two of the scan, the information was tabulated to facilitate an "at-a-glance" look at the quality of the material collected, and a 5-point criteria system for rating was established. This system was adapted from tools already in use by the CDA and the Canadian Health Network website. The rating system is as follows:

1. Credible source
2. Target is clear and appropriate
3. Clear design (attractive, interesting, engaging)
4. Useable/practical
5. Language seems appropriate

- Has been tested or evaluated: ☺
- Is creative: !

Five is the highest rating (i.e. all criteria met), and the ☺ and ! symbols are bonuses. All resources were coded in accordance to this system and are available in hard copy, where appropriate, except for resources that were on loan and subsequently returned.

It is worth noting that research done by The *Dietary Guideline Alliance in 1996* indicated that consumers are looking for the following characteristics when presented with educational materials:

- Give it to me straight (understandable clear messages, plain language).
- Make it simple and fun. (Many see health issues as complicated and, thus, monotonous. Interesting communications may motivate consumers.)
- What's in it for me? (people need to know why they should be doing something)
- Stop changing your mind (give consumers consistent messages to follow).

These guidelines were also kept in mind while examining tools and resources.

3. Highlights from Scan of Tools (Appendix 6)

More than 107 resources were viewed. Most were from the United States, some were from Canada, and a few from other countries including Europe, the United Kingdom, France, Australia, and Japan.

The tools have been categorized in the following manner: videos, handouts, activities, books, web-based information, point of purchase (POP), CD-ROM and others.

Based on the subjective criteria outlined on page 9 (credibility, target, design, practicality, and language), some resources scored 5 – the highest rating possible – and are described below. Other tools receiving a rating of 4 or a special mention for creativity; please refer to the table" Nutrition Label Tools" in appendix 7 for these details.

a. *Videos* (received a 5 rating)

- US-V-1 (1993): "Smart Selections for Healthy Eating – Using the New Food Label," a 6-minute video produce by Public Voice for Food and Health Policy and Campbell Soup Company. This video is professionally produced, is clear and concise, and includes an onscreen quiz at the end.
  Target: Adult consumers.

  Videos can be very creative tools and are easy to use by healthcare workers. Like any other resources aimed at teaching a concept, though, a video must be based on sound educational principles. Videos can help the learners who are visual and can help overcome literacy barriers, however, their lifespan can be short because of dated contents or appearance

b. *Handouts* (received a 5 rating)

- US-HO-6: “How to read the New Food Label”
  Pamphlet: American Heart Association
  Target: Adult consumers
- US-HO-7: “Reading Food Labels: a Handbook for People with Diabetes”
  Booklet: American Diabetes Association/American Heart Association/American Association of Diabetes Educators
  Target: People with diabetes
- US-HO-10: ”Eat Well: Lighten up at 50”
  Booklet: American Association of Retired People
  Target: Older consumers
- CHO1: “Using Food Labels to Choose Foods for Healthy Eating”
  Booklet: Health and Welfare Canada.
  Target: Consumers
- C-HO-4: “Comprendre les étiquettes des aliments” or “Understanding Food Labels”
  Fact sheet: Unilever Canada, makers of Becel
  Target: People with cardiovascular disease
- C-OH-5: “Facts and Fables About Food Labels”
  Target: Consumers
- US-HO-FS1 (1994): “The New Food Label at a Glance”
  One-page handout: USDA
  Target: Consumers
- US-HO-FS2 (1995): “Label Reading for Better Health”
  Two-page handout: Michigan State University Extension
  Target: Consumer.
- US-HO-FS3 (1997): “Label-ease”
  Two-page handout: National Dairy Council
  Target: Consumers
- C-HO-FS3: “Reading Food Labels”
  One-page handout: Heart and Stroke Foundation of Canada, The Community-Based Diabetes Education Program of Ottawa-Carlton
  Target: Consumers

Written handouts such as booklets, brochures, pamphlets and fact-sheets are often used educate people. They are easy to produce and distribute, but could be costly in the long run depending on how many copies are printed. Because of its convenience of storage and dissemination, this type of material is often requested by health educators.

Literacy and readability (with regard to older adults and people with diabetes) may be an issue with written material, so attention must be paid to ensuring easy-to-read font style, size and layout.

c. *Activities* (received a 5 rating)

- US-A-1:"Labels to Go"®
  Workshop booklet accompanied by video; 80 pages, including overheads: Ohio Dietetic Association
  Target: Intermediary and the adult consumer
- US-A-2: "Curious George and the New Food Label;" 8 sheets with activities by KIDSNET
  Target: Older elementary school children
- US-A-7: "The New Food Label: There's Something in it for Everybody"
  50-page booklet with a great poster in the middle, by HHS, PH, USDA and International Food Information Council
  Target: High school curriculum
- US-A-12: "Foodquest for Health Labels"
  Web-activity design by Food Quest.
  Target: Teachers and students
- US-A-15: "Curious George Says Read It Before You Eat It!"
  Activity ideas and video (not viewed) by KIDSNET
  Target: Children

It is an accepted educational principle that when well-designed, an activity will have been tested with the target group and includes a mean for evaluating learning. Activities designed for educators to use with all age groups, or for educators and parents to use with children, should be well-targeted and contain original content to maintain user/audience interest.

d. *Books*

Two booklets have been assessed:

- "The Heart Smart Shopper–Nutrition on the Run"
  Heart and Stroke Foundation of Canada
- "3 Food Steps"
  Heart and Stroke Foundation of Canada and the Windsor Essex County Health Unit

Both of these resources contain sound information within a larger concept but the scope of the information may be overwhelming. They have not been coded because there were only two.

e. *Web* (received a 5 rating)*

A number of websites provide label information, and include an education component, however, few have an evaluation component. Because many websites look similar in their treatment of the topic, they have not all been rated below. However, some sites are particularly interesting and have been highlighted (scored 5). They are:

- US-W-14: "Test Your Label IQ–Your Key to Understanding Sugars," an interactive quiz developed by The Sugar Association, Inc. at www.sugar.org/health/labeliq.html. Target: Teachers, parents and children
- US-W-18: "The Food Label," developed by the FDA at www.fda.gov/opacom/backgrounders/foodlabel/newlabel.html. Target: Anyone interested in reading a simplified version of the regulations regarding food labelling.
- US-W-20: "Lite Reading–A Health Quiz about Food Labels," developed by Island Scene Online–Hawaii Medical Service Association at www.islandscene.com/quiz/1999/990519/food_labels, an interactive quiz. Target: Consumers
- US-W-31: "Label Lore," an explanation of information found on labels, with a specific focus on fiber, developed by Kellogs at www.kellogs.com/nutrition/nutritioncamp/learning/label.htnl. Target: Children
- US-W-38: "Deciphering Food Labels," developed by the Nemours Foundation at www.kidshealth.org/parent/nutrition_fit/nutrition/food_labels.html Complete info about labels, how to use for family health, links to other pertinent info such as healthy meals and allergies. Target: Parents
- US-W-43: "Focus on Food Labelling" for FDA at www.fda.gov/fdac/special/foodlabel/food_toc.html, a series of articles on different aspects of labelling. Target: Consumers
- US-W-44: "Guidance on How to Understand and Use the Nutrition Facts Panel on Food Labels," developed by the FDA at www.cfsan.fda.gov/~dms/foodlab.html. This site provides interactive information to help consumers understand the various components of the "Nutrition Facts" label. Target: Consumers

Although many websites refer to food labels, a surprisingly small number have used the electronic medium to its full potential. The FDA has a lot of good quality information and is probably the leader, not only the amount, but the quality of the information and its originality of presentation. Kidshealth (www.kidshealth.org) is another Web group that

has approached the topic from an original perspective. However, even those 2 examples have not taken full advantage of the Web possibilities.

It is clear that many Canadians look to the Internet for information, so websites could be a valuable tool to educate people about food labels. However, websites needs to provide more than just written information, and ideally should include an interactive (game, quiz, etc.) or visual component (video), to make the learning experience more concrete, practical and fun.

One current limitation regarding the Internet is accessibility: while it is estimated that 54% of people aged15> used the Internet in 2000 (Statistics Canada, March 2001), those with limited income and older consumers are not as likely to use the Internet as a learning tool. There may be opportunities through Industry Canada or various telephone companies to assist in increasing Internet accessibility for target populations (seniors, low income, low literacy) for the HESY project.

* These websites were accessed during the summer of 2001, when research for this Environmental Scan was undertaken. Some links may no longer be live, however, the authors felt their descriptions would still be of interest to readers.

f. *Point of Purchase (POP) Tools*

No point of purchase (POP) programs have been rated because of their unique nature. Specific titles and descriptions are listed in the scan table (Appendix 7) and the programs are discussed in detail here.

Over the last few years, point-of-purchase programs in the nutrition education field have become more popular. An estimated 66% of all food buying decisions are made at point-of-purchase (Dougherty, 1990). Grocery store retail interventions can offer an opportunity to simultaneously educate consumers and influence their food choices (Schapira,1990). One study, which surveyed consumers' perceptions of point-of-purchase programs, reported favourable results: most respondents claimed to have read the material given to them, and those who hadn't been exposed to the program said that they would most likely make use of the nutrition information in the future (Arsenault,1994).

Canadian Diabetes Association – Food Choice Values and Symbols
(http://www.diabetes.ca/about_diabetes/foodfaq.html)
The Food Choice Values and Symbols Program was developed to provide Canadians with diabetes better meal planning management options by using the "Food Choice Values" found on products, and incorporating them into their meal plans. There are seven values in total, each representing a different nutrient.

Some healthcare professionals have expressed concern about the use of symbols or indicators on food labels that are intended to provide consumers with a means to evaluate a food product (Dietitians of Canada, personal communication). They believe symbols may mislead consumers, due to the complexity of applying these symbols within a total diet context. They may also lead consumers to conclude that a product is health-promoting and/or its use is protective against a chronic illness (e.g. use of a low-fat product will protect against heart disease).

Giant Food
Giant Food Diabetes Store Tour offers an interactive, hands-on approach to label reading education (Tenney, 2001). During the tour, consumers are given a labelled product to examine. The tour leader (a dietitian), asks the group questions regarding the importance of the label, and teaches them about its components. Most consumers are newly diagnosed with diabetes, but return for more information on another tour, as they gain more confidence in meal planning and management (Tenney,2001). Although the label knowledge or habits of the clients *before* the tour is unknown, Janet Tenney, Manager of Nutrition Programs, Giant Food, believes there is clear evidence through written evaluation that consumers (especially repeat consumers) who take the tour are reading labels more often.

HealthCheck™

HealthCheck™ was launched in January 1999 by the Heart and Stroke Foundation of Canada. Its purpose is to help consumers make healthy food choices by using the *HealthCheck*™ logo on specific food items. The logo signifies that the food item has met nutritional criteria set out by the Heart and Stroke Foundation, and that the product contains a nutrition label (Dunlow 2001, personal communication). More than 50 manufacturers (encompassing over 300 products in each of the four food groups) participate in the program, and many are renewing their participation. Manufacturers estimate that the program increases their sales by 33%. An increase in participation in the program is forecasted with the venue of the new label in Canada. Five million Canadians have difficulty reading, and focus groups for the Foundation have confirmed that people have difficulty understanding or difficulty seeing food labels. This is why a symbol seems to be an easier solution for many people. A recent Omnibus survey (January 2001) found that 27% (unaided response correct) and 50% (unaided awareness) of focus group participants had heard of the *HealthCheck*™ symbols (Carol Dombrow, personal communications, 2001).

HeartMark

http://www.heartfoundation.co.za/heart_mark.html

HeartMark is South Africa's version of the Canadian program, *HealthCheck*™. Products carrying the *HeartMark* label are low in cholesterol, saturated fat, sodium and high in fibre. *HeartMark* also offers a free toll-free help line for consumers to call with questions on healthy eating, high blood pressure, exercise and weight control.

Loblaw's–Supermarket Tours

Loblaw's supermarket tour program includes information about Canada's Food Guide to Healthy Eating, a discussion about how to read labels, and a cooking demonstration; the main focus of the tour is on fiber, sodium, and fat content in foods. A legal-size, 4-colour handout with President's Choice branding is distributed to participants (Judy Coveney RD, Loblaw's, Toronto, 416/922-1480, ext. 5477).

Pick the Tick

This program was launched in March 1989 by the National Heart Foundation of Australia. Its purpose is to prevent heart disease and stroke and improve the eating habits of the Australian population. The program's success is attributed to the increase in manufacturers' participation (150 companies by January 1999).
http://www.heartfoundation.com.au/docs/tick.htm

Shop Smart

Shop Smart™ involves a grocery store tour whereby Registered Dietitians educate consumers on aspects of healthy eating. Evaluation of participants of the *Shop Smart*™

program showed a 33.3% increase in label reading by consumers who had participated in the program (Kalina,1995), however, no data has been collected to indicate how well consumers incorporated the information into their everyday meal planning. The *Shop Smart*™ handbook for consumers is currently being updated, and will soon contain information on shopping for health food, including sections on ingredient lists, the nutrition information panel and nutrient claims.

g. *CD-ROM*

No CD-ROM was found on this topic through this environmental scan.

h. *Other*

A board game on food labels entitled "Label Power" is available for youths 9-14 years old for the cost of $35 US. The game was designed and marketed by The Sugar Association. More information can be found at www.sugar.org/kids/lpower.htm

i. *Emerging Possibility: Grocery Gateway*

Grocery Gateway (www.GroceryGateway.com) is a new service that offers web-based grocery delivery to consumers. Consumers are able to view products from a "virtual" grocery store while sitting at their computer. In the future, Grocery Gateway hopes to post Nutrition Label information at the website so that consumers may view each product's nutritional facts (Grocery Gateway Response Team, 2001).

j. *Key Material in Developing Stages*

Within the next few months, further information will be available from key informants that will increase the depth and scope of background information necessary for the development of educational materials in the future. It is planned that a paper about food information programs, including the HealthCheck™ program, will be submitted by Shannon Smith RD to the *Canadian Journal of Dietetic Practice and Research*. (Carol Dombrow, personal communications, 2001).

4. Overall Consensus on Tools Collected

There was no single preferred method of educating consumers regarding label reading, however, trends that were evident in most tools were:

- *Black and white picture of the label and its components*
  - Colorful circles, arrow and symbols to highlight ideas were also evident

- Web material offered interactive or descriptive parts of the label that were linked to further information
- *Information on Claims*
  - Most information on claims dealt with the fact that the company followed strict regulations when making nutritional claims
- *Ingredient List Information*, indicating quantity of ingredients
- Where space permitted, a quiz or links to further information were provided

B. Evaluation Methodology

1. Tools with an evaluative component

a. Shop Smart ™

This program explored the effectiveness of the educating that they do. Evaluation of participants of the *Shop Smart*™ program reported a 33.3% increase in label reading of the consumers who had participated in the program (Kalina,1995). Although this is positive, there is no current data indicating how well consumers incorporate the information utilized from the tours in everyday meal planning. *Shop Smart*™ is currently updating the handout information for consumers.

b. Giant Food

In the *Giant Food Diabetes Store*, although the label knowledge or habits of the clients before the tour is unknown, Janet Tenney (Manager of Nutrition Programs, Giant Food) states there is clear evidence through written evaluation that consumers (especially repeat consumers) who take the tour are reading labels more.

c. Label Smart (code C-NIN-V-

b. Giant Food

Giant Food Diabetes Store Tour takes an interactive hands on approach to label reading education (Tenney, 2001). During the tour, consumers are given a product with a label to examine. The tour leader (a Dietitian), asks the group questions regarding the importance of the label, and teaches them the components. Most consumers are newly diagnosed with diabetes, but return for more information in another tour, as they get more confident with meal planning and management (Tenney,2001). Although the label knowledge or habits of the clients before the tour is unknown, Janet Tenney (Manager of Nutrition Programs - Giant Food) states there is clear evidence through written evaluation that consumers (especially repeat consumers) who take the tour are reading labels more.

1

The "*Label Smart*" video and fact-sheet package developed by National Institute of Nutrition offers a consumer feedback component to monitor the usefulness of the video.

However, at the time of the Environmental Scan this information was unavailable. (This data will be valuable in a later phase of "Healthy Eating Is In Store For You"™)

d. Food and Drug Administration "The Food Label and You" Video (code US-V-7)
This video produced by the FDA in 1995 has won The "*Vice President Gore Plain Language Award*" in October 1998, is referred and suggested for use in *the "2000 Diet Guidelines for America*", and used by the *American Health Association*, and *American Association for Retired Persons*. However, no written evaluations have been conducted on this resource.

In addition some of the activities and Web-based tools had a quiz component. See table for scan of tools for details (Appendix 6).

Apart from label education programs that included an evaluation component this scan sought to find approaches that have been used for the evaluations of the use of food labels or other research/programs (such as the Minnesota Heart Health Program and Gimme 5). Those programs could have evaluation components/ideas that would be beneficial in guiding the HESY project (see table in appendix 8).

The research on evaluation included in the scan points to several considerations for evaluation of and for the HESY project. It highlights educational models (i.e.: the Behaviour Alternatives Model) or processes used for evaluation (i.e.: The Minnesota Heart health Program linked the process evaluation to summative, impact, and outcome evaluation methods). The information provided in Appendix 8 'Evaluation Methodology' shows evaluation elements and techniques that may be useful for the HESY project: pilot testing, ensuring the grocery store is part of the evaluation plan, ensuring the evaluation research is conducted with the target groups e.g. people with diabetes and that they are represented in the evaluation data collected, using questionnaires, phone surveys and in-person surveys. Appendix 8 "Evaluation Methodology" shows at a glance what was done in the past, background information, key contacts, tools acquired, and will be a useful resource for the HESY evaluation planning.

The evaluation methodology reviewed through this scan is far from exhaustive. The information gathered through this scan, along with the paper, prepared by Brandi Propas in partial fulfillment of a practicum with the Office of Nutrition Policy and Promotion Health Canada (Propas, B. 2001), will also be useful to the HESY team guiding the HESY evaluation.

Health Canada is developing an evaluation component around the new label. The HESY team is in contact with Health Canada and will work to include the governmental evaluation as part of the project (personal communication, Sarah Conly, Health Canada, July 2001).

2. Overall Sense of Evaluation in Nutrition Labelling Education

There has been limited effective evaluation conducted on nutrition labeling education. Literature in the field of education models, consumer behaviour, nutrition education and behaviour modification may be useful to the HESY project. Targeted evaluation (including testing of resources) will be required for HESY to be able to document the success of the various components of the project – prospectus, tool kit, interactive inventory, and virtual grocery store.

C. International Perspective (see table in appendix 7)

1. International Nutrition Labelling Education

The international information was collected to acquire a sound understanding of food labelling in key countries across the world and to explore the existence of food label educational tools in countries other than in North America. To ensure that the HESY project did not reinvent the wheel, this scan included an intensive search on the Web and contacts with key people and groups [for practical purposes, only English and French speaking countries were included]. The details of the environmental scan are available on the table "International Policies and Directions" in appendix 8.

The following is a brief summary of the findings.

a. *Canada*

- Proposed regulation Gazette 1 (June 2001) – final regulation – Gazette 2 -- most likely to occur in March 2002.
- Proposed regulation is very similar to the United States – NLEA regulation and will include: mandatory nutrient-label, nutrition and health claims accepted, for pre-packaged foods.

b. *United States*

- NLEA adopted in 1990 – includes nutrients on label, nutrient claims and health claims.
- The US has a longer history of use of the new label.
- The US is the country where the most educational tools on the topic and the most research about the use of the labels are found.

c. *United Kingdom*

- Food Labelling Regulations of 1996 implemented the European Food Labelling Directive.
- Nutrients on label.
- Draft guidelines for nutrient claims.
- Disease reduction claims are under discussion.
- Some consumers consultation available online.
- No educational tools were found.

d. *Australia / New Zealand*

- Labelling gazetted in December 2000.
- There is a 24-month introduction period.
- Label includes nutrients, however nutrient claims, health claims are not currently permitted but are being considered.
- No consumer education tools were found.
- Government is developing fact sheets.

NOTE: The Dietitians Association of Australia is interested in keeping in touch and following the progress of the implementation of new regulations in Canada.

e. *France*

- Information about energy and nutrients is not mandatory in France nor in Europe, however, it is mandatory if a nutritional claim is on the label, in the advertisement or presentation of a product.
- No educational tools were found.

In Europe and Australia, there are discussions about genetically modified (GM) labelling. Food safety is also a topic of interest.

2. Overall sense of Nutrition Labelling Education Internationally

In conclusion, many countries have just started to implement new labelling systems. It would be of interest to keep in touch with the key people contacted to see what types of educational resources are implemented and their success. At this point, the United States is the country with the most educational information available to us.

D. Gaps

This environmental scan has helped identify some major gaps in label educational tools currently available to consumers.

1. Lack of Evaluation

It was evident while examining the resources that most tools did not have any method of evaluation linked with them. Therefore the effectiveness of the tools regarding how well they educated the consumer was not available. Some resources offered only anecdotal evidence that the tool was successful for the intended target audience. Evaluation has become necessary during the development stages in order to gage how effective a program has been once it's been operating. Lack of evaluation makes it very difficult to determine "best practices" or effective ways of doing something.

2. Lack of Canadian Resources

Most of the educational material currently available about food labels is from the United States. There is interesting material available, however, the content of the information needs to be put within a Canadian concept.

3. Discontinued Materials

Another gap in collecting materials was that most American tools had been discontinued after 1995-6. When questioned as to why the tools were no longer available or in circulation, most replies consisted of "Lack of funding" or "They decided not to reprint the material". It would seem that after the initial mandatory policy change with the National Labeling Education Act implementation in 1994 (FDA,1990), the notion of label reading education dissipated, and was replaced by new ideas and more current happenings in the nutrition arena such as educating on health claims (Health Canada, 1999b).

4. Lack of Creativity

It is clear from the environmental scan that despite the fair number of educational tools gathered, very few were creative and designed to draw-in consumers' interest. Focus testing tools could be the answer to enhancing creativity and development of tools that will "speak" to the user.

IV. RECOMMENDED ACTIONS

A. Short Term

- Create key messages for HESY in line with Health Canada. Key messages are in the process of being developed by Health Canada and stakeholders. At this point in time, 4 key concepts are being considered:

- New food label – awareness (short term concept)
- Information on label / choices / benefits
- Serving size concept – or amount of food and nutrients declared
- % DV as a benchmark for assessing nutrient quantity

(Personal communication, meeting with Sarah Conly, Health Canada, July 25, 2001)

- The HESY team is encouraged to develop the tool kit using those key messages. HESY will work in close collaboration with Health Canada to develop complementary resources and therefore reinforce the messages.
- In order to find out what types of educational vehicles will work with consumers, focus group results must be examined to indicate the educational needs. Useful data will be available through Health Canada partners.
- Have baseline data to work from regarding label reading in Canada that can be incorporated into outcome evaluation. Several studies have been conducted, most recent numbers can be used as baseline.
- Determine ongoing monitoring of current practices with key informants and partners (ie. Evaluation from NIN video "Label Smart" must continue to see results of education)
- Examine other methods of offering access to nutrition education to lower income/literate clients e.g. Telehealth, Internet.
- Include evaluative components into the planning of the education materials so that outcomes can be determined. By incorporating outcome goals, the effectiveness of the HESY project can be measured.

B. Long Term

- Create consumer tools with underlying findings of what consumers want in education material (Dietary Guideline Alliance, 1996).
- Target the tool appropriately to various groups (focus testing may help here).
- Link key messages to existing materials to reinforce current healthy eating recommendations (i.e. Food Guide to Healthy Eating). Provide label information within a healthy eating total diet context.

V. CONCLUSIONS

This environmental scan provides a comprehensive overview of nutrition labelling education. It includes a scan of educational tools currently available, a scan of evaluation methodology and a scan of international policies and directions about food labelling.

The international section of the scan shows that many countries are in a process of change regarding food labelling and therefore food labelling education. Many of the people contacted showed an interest in this unique Canadian process that aims to integrate the educational component with the implementation of the new label. Hopefully Canada can evaluate the process and the outcome of this educational endeavour, and provide solid data in favour of an educational integrated approach – other countries will be watching.

There are some interesting educational tools that have been developed. However, there are opportunities for more imaginative and integrated approaches that will offer coherent, consistent and practical information so consumers can understand and use the new labels within a healthy eating context.

This environmental scan offers the HESY team a starting point for making decisions about tool development and implementation. In order to make these decisions the Project team, with the assistance of the Project Advisory Committee will need to answer the following questions:

- How do we use the interesting material that does already exist?
- What are the defining characteristics of the target groups in the HESY project?
- Could any of the tools found in the scan be adapted for any of the target groups in the HESY project?
- What educational model would be the most appropriate?
- What evaluation components will we need to incorporate?
- What is the “dream” tool kit?

Some challenges to education and buy-in of the educational tools may come from the final label (i.e.: scientific background for inclusion of certain nutrients may be controversial within the scientific community, concepts such as % DV will be challenging

to explain) and these challenges can only be fully identified when Gazette 2 is published.

In examining the next steps to “Healthy Eating Is In Store For You”™ it is evident that evaluation is key to the development of the project, and must be a focus throughout the process. It is also important to address barriers to education when developing consumer education material and activities. The success of the Healthy Eating is In Store for You™ project is dependent upon finding appropriate solutions to these questions.

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References for the particular tools and evaluations are available on the respective scan tables.

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