Technical Research Paper
for Improving Label Comprehension

INTRODUCTION

Product labelling is a cornerstone in the communication between a consumer health product marketer and the public. For this reason, Consumer Health Products Canada is continually seeking means to improve labelling. The ever increasing amounts of information required by Health Canada to be on labels has resulted in a challenge to marketers and a review of the information currently on labels has concluded that little information can be omitted.

The Technical Research Paper for Improving Label Comprehension can be used by marketers as labels are revised or new labels developed. This paper contains means by which to improve consumer health product labels that will lead to an overall increase in comprehension by the public.

It is recognized that regulatory requirements, accommodation of English and French languages on labels and various packaging constraints may restrict the utilization of some of the suggested tactical guidelines.

This paper is presented in two sections, Understanding of Label Copy and Readability of Label Copy.

UNDERSTANDING OF LABEL COPY

1.   ORGANIZATION

Base the order and prominence of information on what is of most importance to the reader. Strive for consistency in the layout of this information.

- o   Active ingredients
- o   Uses or indications
- o   Warnings
- o   Directions
- o   Other information
- o   Non-medicinal ingredients (Note: In the interest of consumer needs, this information may be given greater prominence.)

Place English and French messages on separate panels, if space is available, to avoid confusing the reader.

Label format: organizing the information in a structured format with dividing lines to highlight the information.

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2. TONE

Use active constructions. Active constructions are the shortest, most direct way to convey instructions. Passive constructions have a distant, vague, indirect tone and can confuse the reader.

- o Address the reader directly, using inclusive and respectful language.
- o Address the reader as "you," as a physician would in advising a patient.
- o Do not use colloquialisms (figures of speech), they may confuse people who speak English as a second language.
- o Use everyday words to talk about symptoms and medications wherever possible, but avoid words that sound childish, imprecise, or overly familiar.

Some examples are contained in Appendix A.

3. LANGUAGE

Delete all unnecessary words from packaging copy through a process of drafting and redrafting.

- Use shorter words whenever this can be done without losing precision.
- Avoid nominal forms, in which a verb is turned into a noun by adding more syllables.

Some examples are contained in Appendix A.

4. SENTENCE STRUCTURE

Break complex sentences into simpler ones, or use point form to list items or phrases.

Some examples are contained in Appendix A.

5. GRADE READING LEVEL

The vocabulary used in Label and insert copy should be easily understood and in common usage. The vocabulary and sentence length should be at a Grade 7/8 reading level or lower in order for copy to be comprehended by a broad base of demographics of readers. The Fry Readability Graph (Appendix B) is an aid to test the reading level of copy.

READABILITY OF LABEL COPY

The following provides optional executable guidelines for consideration in the process of achieving "eye pleasing" layout of copy. There may be circumstances in which specific guidelines may be difficult to execute. In such cases, judgement should be applied in order to maximize the readability of the copy.

1.   WHITE SPACE

White space is the blank space between and around type and graphics. The reader needs white space in order to rest the eyes and stay oriented in the text.

Incorporate some white space into the design, between words and letters (see type styles), between lines (see leading) and at the end of lines (see type alignment and line length).

2.   TYPE SIZE AND LEADING

When designing a package insert, choose a type size that maximizes the available space. For side panels on drug packaging, use the largest point size possible while respecting regulatory requirements and packaging constraints.

Leading is the white space between lines of print. When type is very small, it is necessary to adjust the leading so that the space between lines increases by about two points.

3.   TYPE STYLES (FONTS)

Readers identify words and letters by shape. The most shapely type styles are called "serif types." Serif type is appropriate for the body copy of a package insert in a type size of 10 points or more.

At small type sizes less than 10 points, it is best to use a sans serif type. These type styles (such as Helvetica, Univers, or Arial) are less ornamented and will stay crisper in the sizes needed for packaging panels.

Following are examples of serif and sans serif type styles:

This is an example of a serif type style (Times New Roman).
This is an example of a sans serif type style (Arial).

4.   TYPE ALIGNMENT

Left justified type alignment prevents the forced gaps between words created by fully justified text, and reduces the need for hyphenation. Hyphenation is not recommended, because breaking a word interrupts the reader's concentration and the flow of meaning.

5.   LINE LENGTH

Readability research recommends lines of about 39 characters. A long side panel should be broken into two columns to prevent line lengths that exceed 39 characters.

6. HEADINGS

Headings are visual markers that lead the reader quickly to key information. Headings should be used to separate the key information.

Each heading should have its own, separate paragraph. Dosage instructions are more effective in a chart format than as narrative instructions.

Sans serif types make good headings, because their straight lines lead the reader's eye down into the text that follows. Always put headings in bold face.

Leave more space above a heading than below it.

7. EMPHASIS

Bold is the best way to emphasize text in drug packaging. *Italics*, underlining, ALL UPPER CASE, reverse (white on a solid background) and shadow types are not useful because they increase reading strain when used in small type sizes.

Boxing information for emphasis is effective if there is sufficient white space available to set off the box from the text around it. Several boxes on a side panel may remove the impact and result in crowding and clutter.

8. COLOUR AND CONTRAST

Colour alone should never be used to cue the reader to important information. Use it in combination with bold face.

High contrast - dark lettering on a light surface - is best for readability. Colour saturated backgrounds and grey or coloured screens reduce contrast and cause eyestrain, especially with small type sizes.

Brightness and high contrast help readability; glossy or reflecting surfaces do not, because the glare interferes with reading.

SUMMARY

This Technical Research Paper is intended to help marketers develop labels that are more comprehensible to the public.

Consumer Health Products Canada members are encouraged to implement these suggestions in order to achieve optimal label comprehension.

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APPENDIX A

A.   Examples of active phrase constructions

Example	Alternative
It is hazardous to exceed the maximum recommended dose unless advised by a physician.	Do not take more than this dosage unless your doctor tells you to.
unless directed by a physician, except on the advice of a physician	unless your doctor tells you
a physician should be consulted	talk to your doctor

B.   Examples of easier to understand phrases

Example	Alternative
Persons (individuals) with high blood pressure should	If you have high blood pressure,
If pain persists	If you still have pain
This medication may cause drowsiness. Avoid activities requiring mental alertness.	This medicine can make you sleepy. Don't take it when you have to be alert.

C. Examples of ways to reduce words in packaging copy

Example	Alternative
provides relief of	relieves, helps
This package contains enough medication to seriously harm a child; keep out of reach of children.	Keep **all** medicine safely away from children.
as well as	and
each caplet provides; each tablet contains	in each caplet; in each tablet
accompanied by high fever	with high fever
if you are presently taking	if you are taking
rapid	fast
in the case of	if

D. Examples of how to use simpler words

Example	Alternative
contact	call, talk to
avoid alcoholic beverages	do not drink alcohol
immediately	right away
prior to	before
prompt	quick
persistent or chronic cough	a cough that won't go away
Apply ointment internally and on the exterior surface of the anus.	Apply ointment inside and outside the anus.

E. Avoid nominal forms, in which a verb is turned into a noun by adding more syllables

Example	Alternative
difficulty in urination	trouble urinating
if underlying condition persists	if you still have symptoms
in the case of accidental overdosage	if you take too much medicine by mistake

F. Examples of how to break complex sentences into simpler ones, or use point form to list items or phrases

Example	Alternative
If symptoms persist for more than a week or are accompanied by high fever or tend to recur, consult a physician.	Talk to your doctor if: • your cough comes back or does not improve • you have a high fever
Do not take this product if you have heart disease, high blood pressure, thyroid disease, diabetes, glaucoma, or difficulty in urination due to enlargement of the prostate gland unless directed by a doctor. Do not take this product if you have chronic lung disease or shortness of breath unless directed by a doctor. If elderly, consult a physician before using this product. As with any drug, if pregnant or nursing a baby, consult a health professional before using this product.	Talk to your doctor before you take this if you have: • heart disease • thyroid disease • glaucoma • lung disease • high blood pressure • diabetes • enlarged prostate • shortness of breath If you are older, pregnant, or nursing, get your doctor's advice first.
Consult a physician if the underlying condition requires continued use for more than 5 days, before taking this drug during pregnancy or when nursing.	Talk to your doctor if you need to take this product for more than 5 days, or if you are pregnant or nursing.

APPENDIX B

THE FRY READABILITY GRAPH

The Fry readability graph is one of the easiest standardized tests to use. You can apply it to a text that has as little as 100 words. It can be applied to longer texts by taking three or more samples and averaging the results.

The graph will give you an estimate of the grade level of education required to read the text with ease. This readability score can often be useful in persuading a person or organization that their material probably isn't reaching their target audience. However, the graph (like all standardized tests) has limitations. Use it, but know what it can, and cannot, do.

The Fry readability graph cannot tell you any of the following information:

- how the material is written
- how complex the ideas are
- whether or not the content is in a logical order
- whether or not the material makes sense
- whether the vocabulary is appropriate for the audience
- whether the grammar is correct
- whether there is gender, class or cultural bias
- whether the design is attractive and helps or hinders the reader
- whether the material appears in a form and type style that is easy or hard to read

HOW TO USE THE READABILITY GRAPH

1. **Start at the beginning of a sentence and count out 100 words.** A word is any group of symbols with a space on either side. The following would all be counted as words - Joe, UIC, 1945, &, etc.

2. **Count the number of sentences in the 100 word passage.** If the passage ends in the middle of a sentence, estimate the length of the last sentence to the nearest tenth (e.g. 2.3, 4.5).

3. **Count the number of syllables in the 100 word passage.** The number of syllables corresponds to the number of beats you hear when you say the word aloud. Generally there are as many syllables as there are vowel sounds. For numbers and short forms, count one syllable for each symbol (e.g. 1945 = four syllables, & = one).

4. **On the graph, find the number of sentences (side) and the number of syllables (top).** Mark the spot where the two lines intersect. This is the approximate grade level of the passage.

5. **Repeat for two (or more) samples in a long document.** Take the average of at least three assessments as the average reading level required for the document.

6. **If the lines meet in the grey area, the measurement is not accurate.** Try again with another passage.

Fry Graph for estimating Reading Ages (grade level)
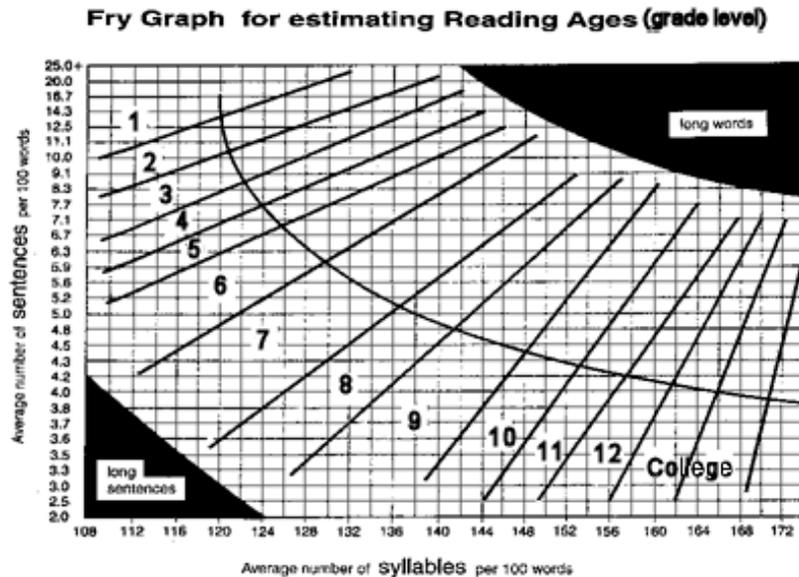
WHAT IS A "GOOD" READING LEVEL?

The appropriate reading level depends on the audience you are writing for. A technical article written for people with specialized training could be written at a higher level than an information pamphlet for the general public. Know your audience!

Some general guidelines	Fry levels
Specialized information for informed audience.	9 - college
Material written for the general public.	6 - 8
Material written for general public including people whose first language is not English.	5 - 6

- Most newspapers are written in the grade 6 - 8 range, but include articles that are more difficult.

- In a pamphlet or booklet, try to write at a consistent level. If some information is more important, make it stand out by using highlighting or a different layout.

- In a newsletter or newspaper, try to include a least one article per page that is easier to read. It will encourage your readers to keep reading through the whole paper.

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