

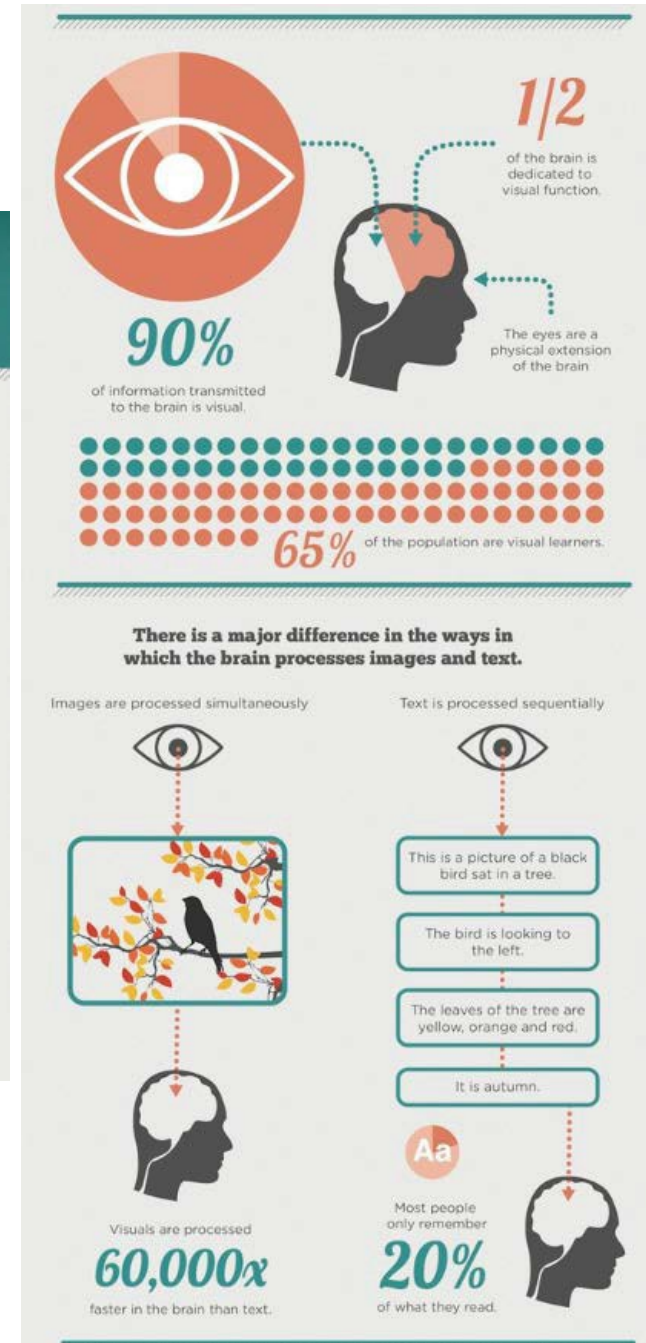
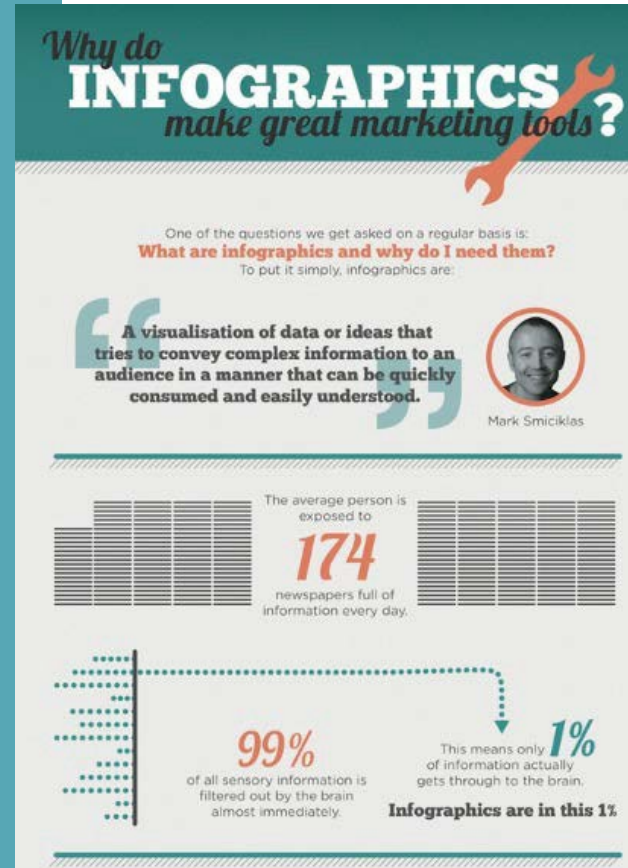
Infographic Design

Justin Brown, DVM

Slides adapted from Shannon Brown, University of Guelph

Infographic facts

- Infographics are 30x more likely to be read than text
- 65% of the population learns best visually than via text
- 50% of the human brain is dedicated to visual learning
- People tend to remember only 20% of what they read
- The human brain tends to filter out 99% of the sensory information it encounters
- However, it notices novel information

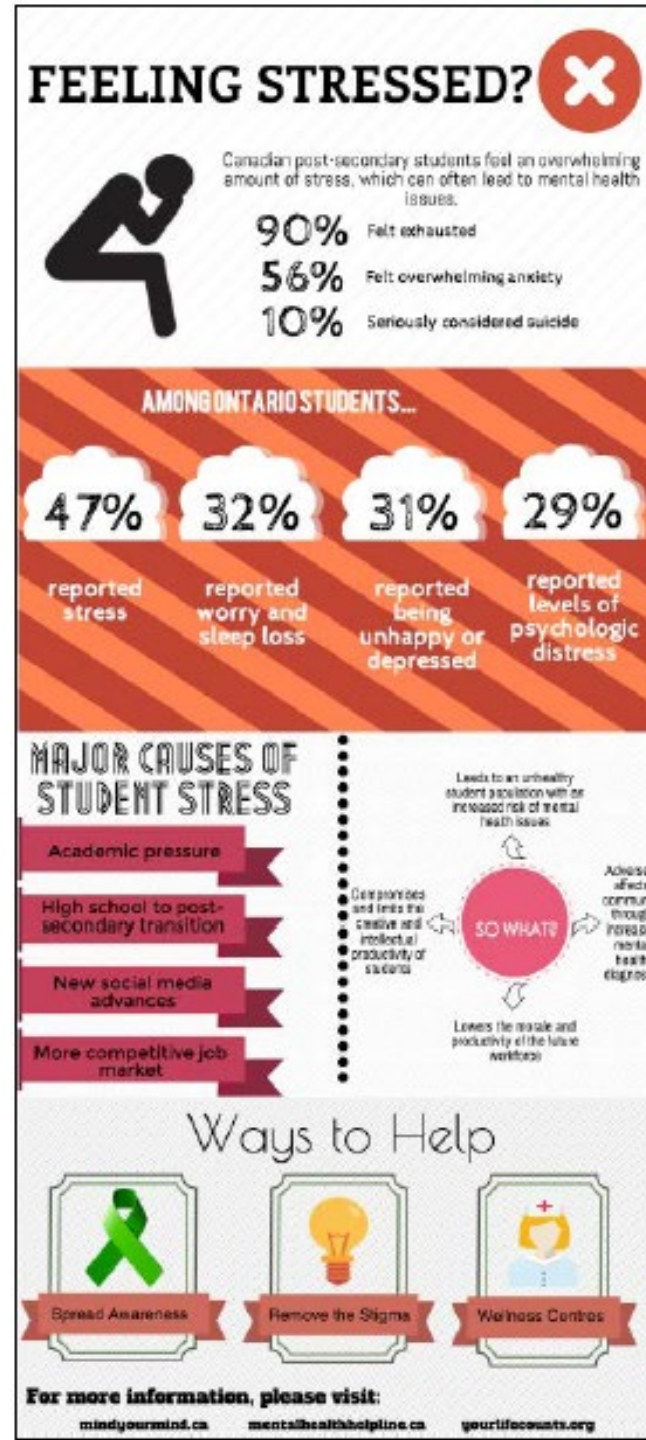


General rules

- **Use text wisely:** If the text was removed, could you still understand the idea your infographic conveys?
- **Lean towards the visual:** People are naturally drawn to images over text. The key point is that infographics are easy on the eyes and simple to read. Add icons to support and explain the text
- **Include a visual hook:** Capture the intended audience's attention. Ideally this also gives the audience an idea of what the infographic is about
- **Visualize data consistently:** Use consistent style and scale for your data visualizations throughout the infographic

Focus on

- Message
- Content
- Design



Message

- **What are you telling the audience?**
 - Why should they care?
 - Summarize what research is about
 - Highlight the impact

Content

- What do you include in the infographic?
- Plain, clear language
- Audience can understand the first time they read it

- **Tips**

- Avoid acronyms
- Use common words whenever possible
- Use technical terms only when necessary
- Organize information logically
- Write clearly
- Write concisely

Content

- **Why should your audience care about your research?**
 - Distill the information
 - Make your title catchy and clear
 - Eliminate all but the vital information
 - Reduce information to concise statements
 - Reinterpret text as charts, graphs, icons, or illustrations

What NOT to include

- **Long-form text**, which contains more information, tends to cause the reader to tune out sooner giving them the opportunity to miss the point of your message.....
 - Keep your message short
 - Keep your message engaging
- Do **not** mix text sizes
- Don't underline – use *italics*

Design principles

1. Form



- Visually appealing
- Colours are harmonious
- Well chosen typefaces

2. Function



- Serves its purpose
- Easy to read and understand

3. Feeling



- Stays on message
- Cohesive mood throughout
- Evokes proper emotional response

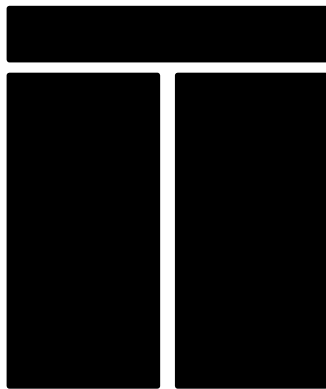
Layout

The placement of content should be balanced throughout the graphic.

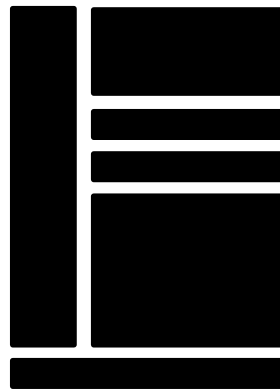
Symmetrical: equal on both sides

Asymmetrical: skewed but uses white space

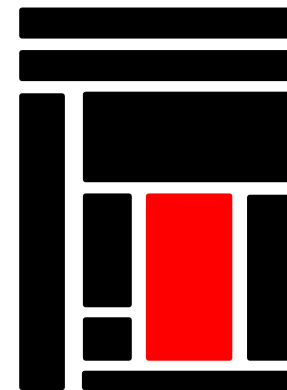
Radial: arranges objects around a central point



Symmetrical



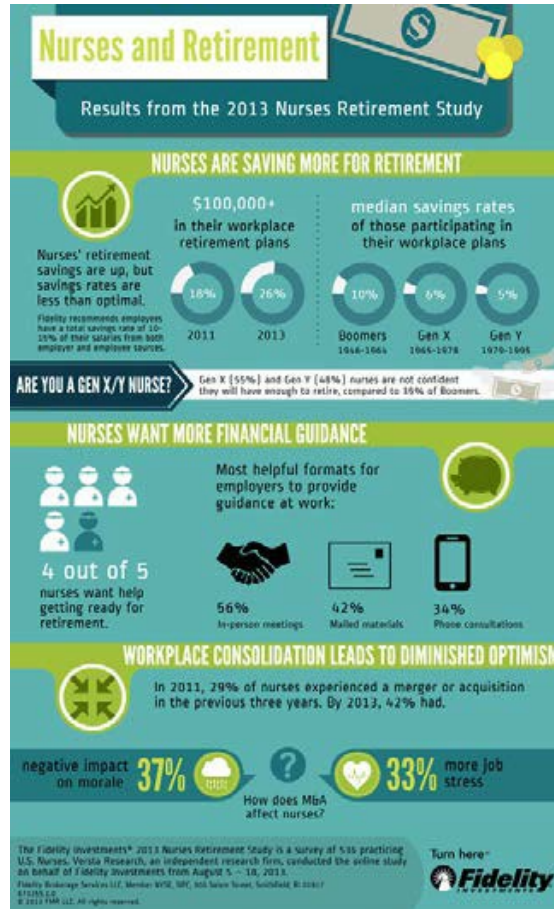
Asymmetrical



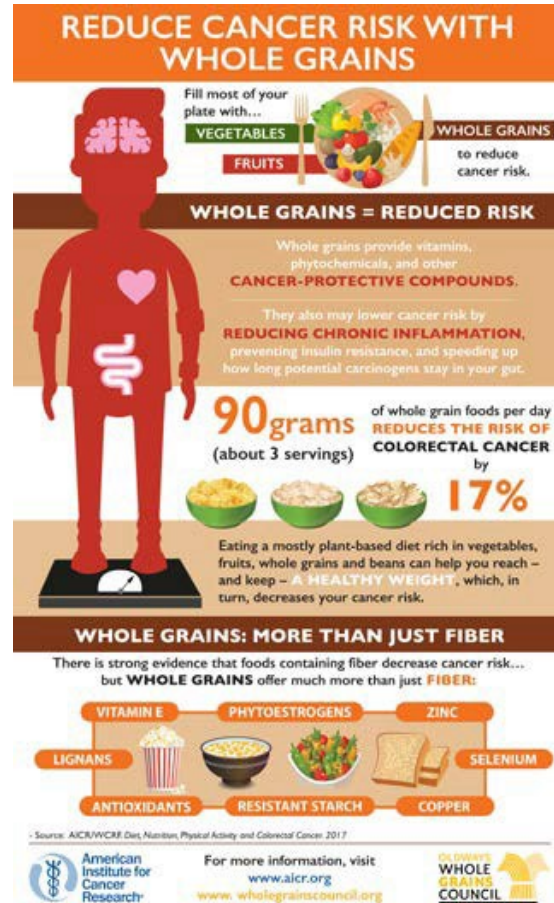
Radial

Layout - examples

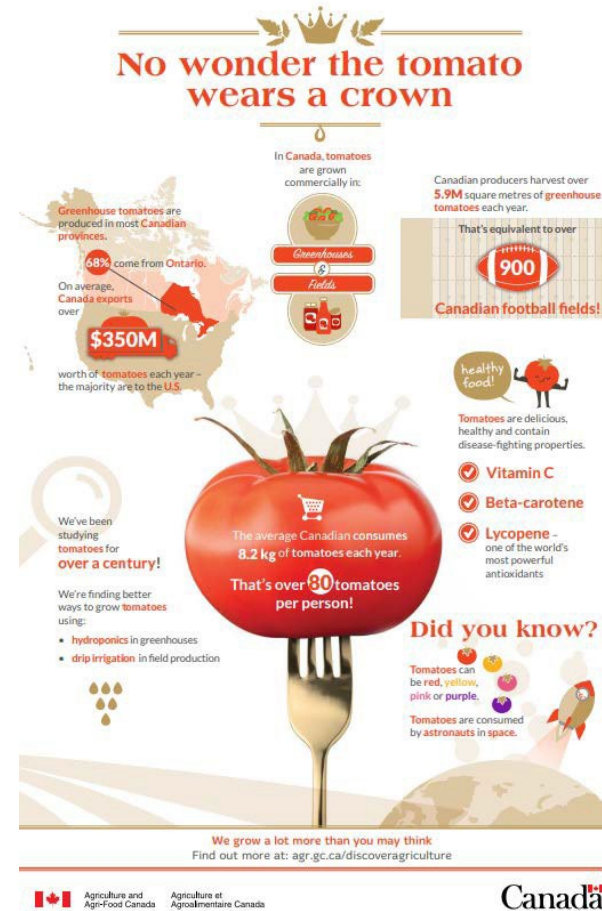
Symmetrical



Asymmetrical



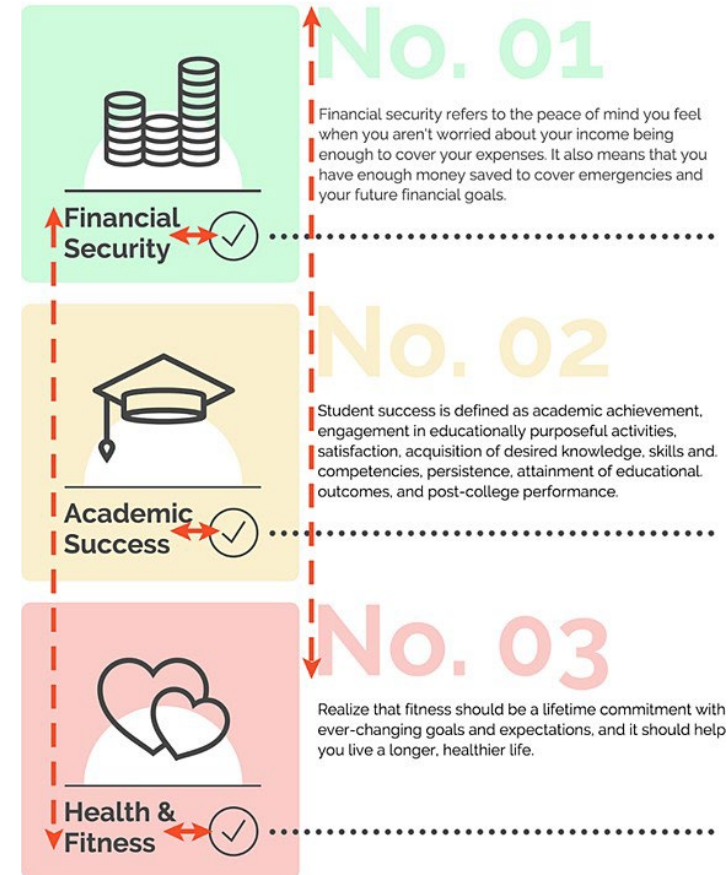
Radial



Alignment

- Ensure that text and graphics are aligned. Use a template and gridlines to help align your elements to each other
- Aligning objects properly keeps a design clean and avoids the messiness of randomly placed objects.

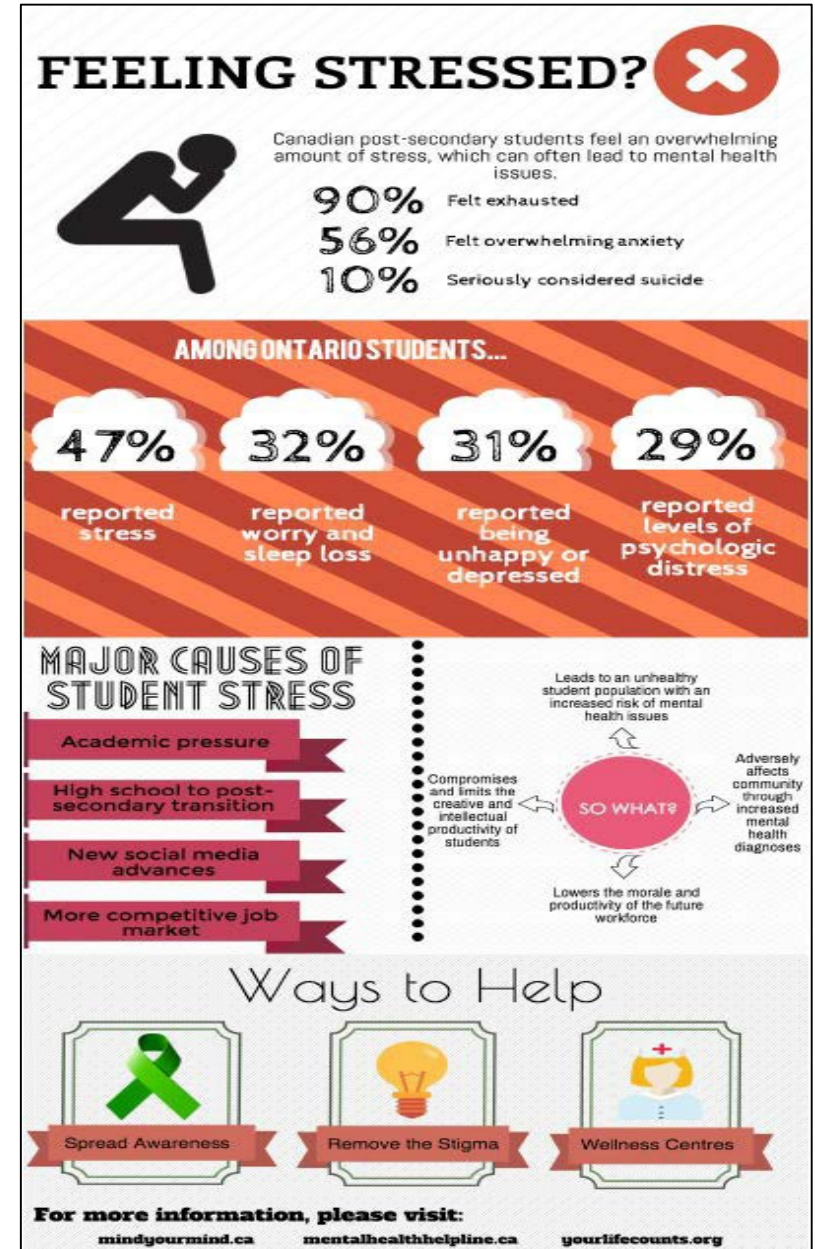
My Yearly Goals / 2017



<https://blog.hubspot.com/marketing/infographic-design>

Repetition

- Strengthens the overall look and ties different elements together to help keep them organized and consistent.
- Text, colour, background colour and image styles can all be used to achieve repetition.
- Can also be used to draw attention to an element.



Proximity

- Creates organization by grouping similar or related elements together. Proximity can include visually connecting elements using placement, colour, typeface, size, etc.

WHAT EVERY YOUNG WOMAN SHOULD KNOW ABOUT **BREASTCANCER** *Did you know, breast cancer is not just an older women's disease!*

Get The Facts

1 in 9 women will develop breast cancer within their lifetime

Breast cancer is the leading cause of cancer deaths in women under the age of **40**

18% of breast cancers occur in females under the age of 50

50-69 yrs 70+ yrs < 50 yrs

Be Aware of Risk Factors

Know your risks!

*always talk to your family doctor!

- ✓ Age
- ✓ Poor Diet
- ✓ Smoking
- ✓ Long-Term Birth Control Use
- ✓ Ashkenazi Jewish or African Background
- ✓ Physical Inactivity
- ✓ Alcohol Intake
- ✓ Family History

What You Can Do

eat healthy & maintain a healthy weight

have confidence!

perform a monthly self-breast exam

lower or avoid alcohol intake

do not smoke

stay active, be positive!

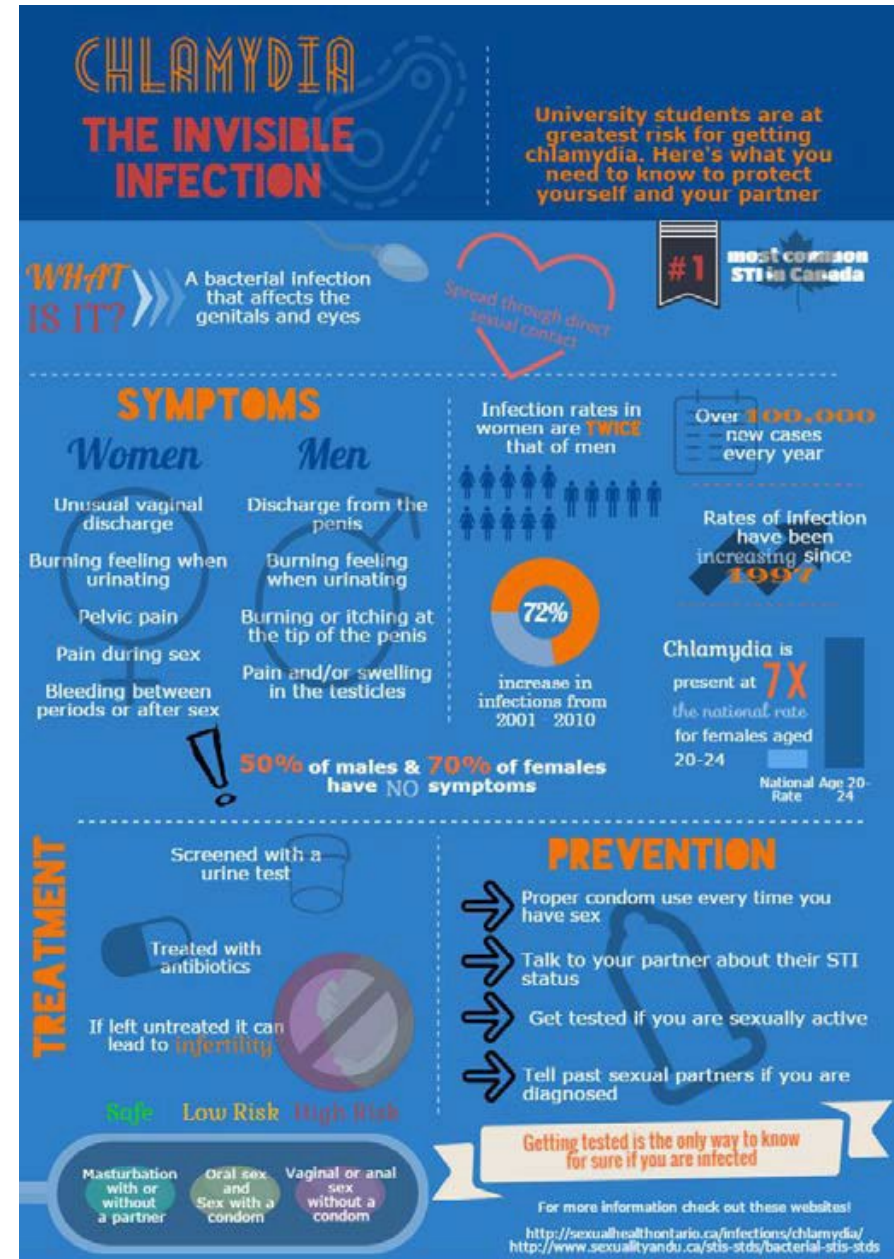
Ontario Cancer Care Ontario
Canadian Cancer Society

www.cancercare.on.ca
www.cancer.ca
#mybreasthealth

powered by **Piktochart**
make information beautiful

Contrast

- Use contrasting colours to highlight the most important element of your poster
- Contrast directs your audience to what's most important



White space

- Avoid cluttering the design by leaving plenty of space between elements.
- Creates shape and can help highlight the most important pieces of information in your design.
- Never underestimate the power of simplicity.

NO WHITE SPACE

LOGO

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent luptatum zzril delenit augue duis dolore te feugait

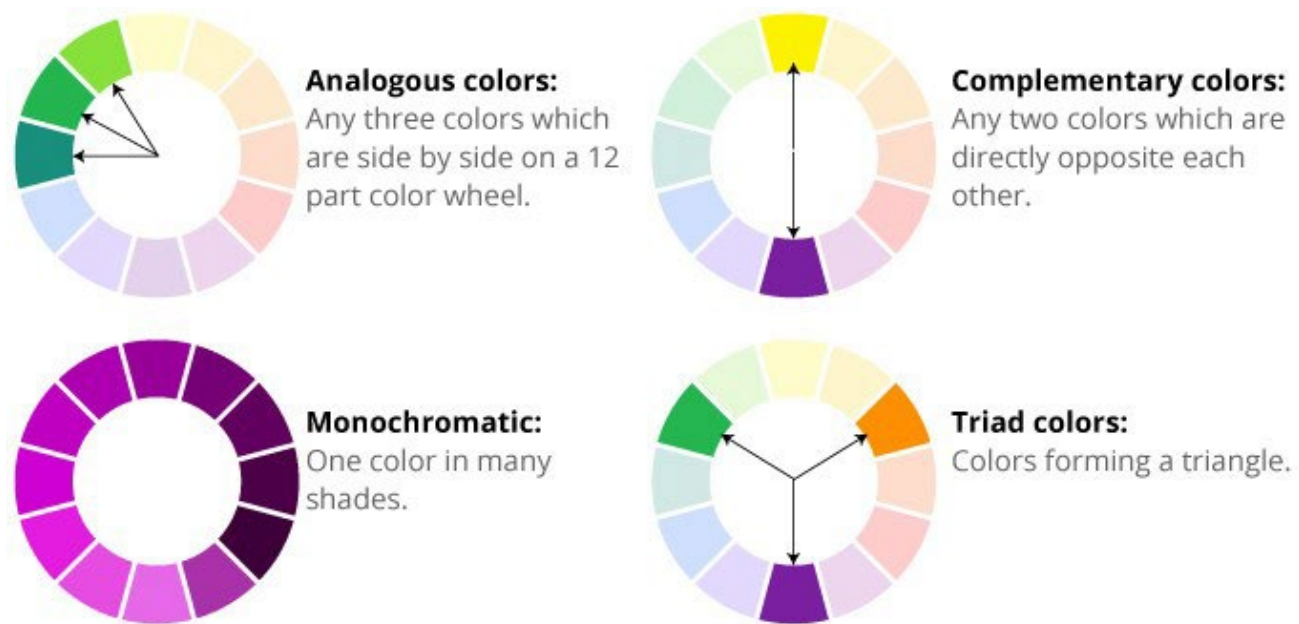
WHITE SPACE

LOGO

Lorem ipsum dolor sit amet, consectetur adipiscing elit, sed diam nonummy nibh euismod tincidunt ut laoreet dolore magna aliquam erat volutpat. Ut wisi enim ad minim veniam, quis nostrud exerci tation ullamcorper suscipit lobortis nisl ut aliquip ex ea commodo consequat. Duis autem vel eum iriure dolor in hendrerit in vulputate velit esse molestie consequat, vel illum dolore eu feugiat nulla facilisis at vero eros et accumsan et iusto odio dignissim qui blandit praesent

Colours

- Start with 1 or 2 harmonious colours
- Choose colours associated with your subject matter or that are prominent within the graphics of your project.



Typography

- Keep accessibility in mind!
 - Sans serif fonts known for clarity and legibility
- Font size is important!
 - Aim to not have text < 28pt
 - Vision issues
- Pick **2-3 fonts** and stick with them for the entire poster
- It is always acceptable to use only one typeface and bold the heading.
- **Sans Serif** - lacks decorative features on ends of letters. Cleaner and easier to read
- **Serif** - contains decorative features on letters. Better for more traditional projects
- *Display fonts* – many different styles. Best for small amounts of text (titles, headers) and more graphic-heavy designs

Steps for making an effective infographic

1. Story

Identify the key focus/story the infographic needs to convey to the audience. Pick 2-5 key findings to drive the story.

2. Think of the big idea

Think broadly beyond the narrow academic audience. Have a very explicit, catchy and simple headline.

3. Remember your audience

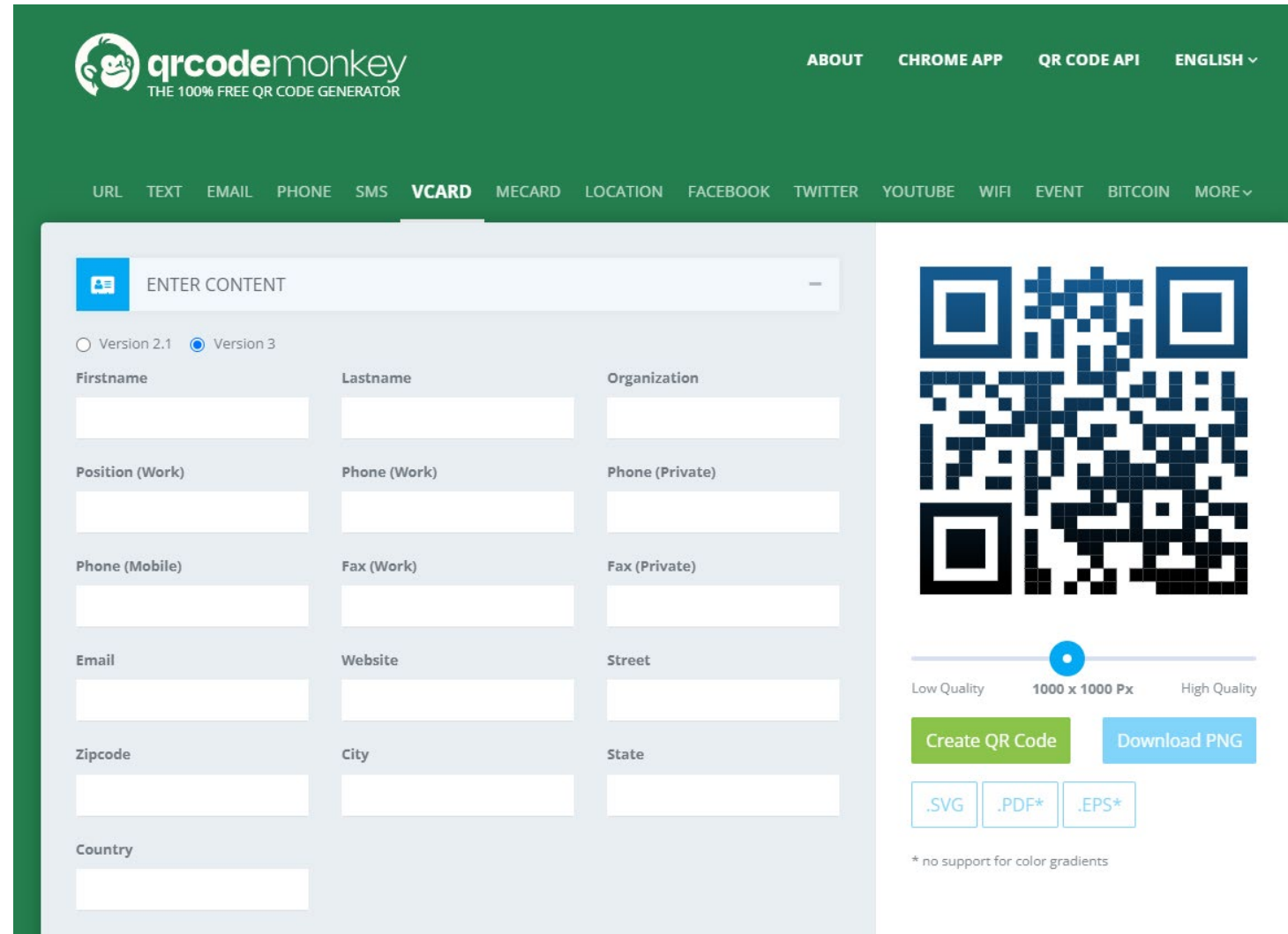
The aim is to make research accessible and they likely aren't familiar with your research area.

4. Design

Pick your images, icons, colour schemes and typography.

Include a QR code

- Use qrcode monkey
- Include your contact information
 - Name
 - Email
- Allows someone to contact you with questions if you're not present at your poster



The screenshot displays the qrcodemonkey website interface. At the top, the logo features a monkey holding a QR code, with the text "qrcodemonkey" and "THE 100% FREE QR CODE GENERATOR". Navigation links include "ABOUT", "CHROME APP", "QR CODE API", and "ENGLISH". A secondary menu lists various content types: "URL", "TEXT", "EMAIL", "PHONE", "SMS", "VCARD" (highlighted), "MECARD", "LOCATION", "FACEBOOK", "TWITTER", "YOUTUBE", "WIFI", "EVENT", "BITCOIN", and "MORE".

The main content area is a form titled "ENTER CONTENT" for creating a VCard. It offers two versions: "Version 2.1" and "Version 3" (selected). The form fields are organized as follows:

Firstname	Lastname	Organization
Position (Work)	Phone (Work)	Phone (Private)
Phone (Mobile)	Fax (Work)	Fax (Private)
Email	Website	Street
Zipcode	City	State
Country		

To the right of the form, a large QR code is displayed. Below it, a quality slider is set to "1000 x 1000 Px" between "Low Quality" and "High Quality". Action buttons include "Create QR Code" and "Download PNG". Output format options are ".SVG", ".PDF*", and ".EPS*". A note at the bottom states: "* no support for color gradients".

EXAMPLES

What have past students made?

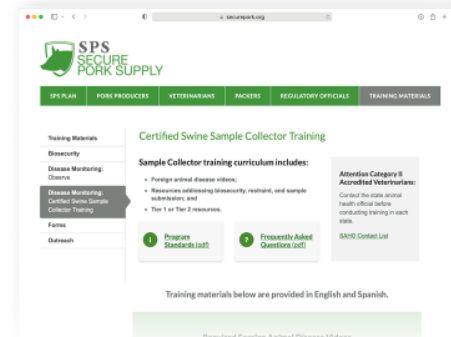
Abstract to infographic

- This study advances the conceptualisation and operationalisation of consumer engagement in the context of online brand communities (OBCs). Past scholarship has only partially addressed the dimensionality of engagement and the different engagement foci, and these oversights have important theoretical and empirical consequences. This study contributes to the nascent stream of research that aims to theoretically refine and operationalise engagement by espousing the duality of engagement with two engagement foci (brand and community) and seven sub-dimensions of consumer engagement. Using qualitative data from consumers and experts, three survey data sets based on English and French samples, and two pools of mirrored items (one for each engagement focus), the study develops and validates a dual-focus 22-item scale of consumer engagement that can be used to operationalise engagement with various consumer engagement objects.



CSSC Certified Swine Sample Collector TRAINING PROGRAM

Justin Brown, Pam Zaabel, Sherrie Webb, Mary Breuer, Meredith Petersen



[SECUREPORK.ORG/TRAINING-MATERIALS/DISEASE-MONITORING-SAMPLE/](https://securepork.org/training-materials/disease-monitoring-sample/)



SCAN TO ACCESS:

This project is funded by USDA's Animal and Plant Health Inspection Service through The National Animal Disease Preparedness and Response Program

OBJECTIVE:

Develop a curriculum and resources for a diagnostic sample collection training program to be implemented by category II accredited veterinarians for pig producers and pig industry personnel.

WHAT THIS MEANS FOR PORK PRODUCERS:

An increase in authorized individuals who have the ability to collect and submit diagnostic samples during a foreign animal disease response.

Contact your veterinarian to become certified in sample collection.

VIDEO TUTORIALS

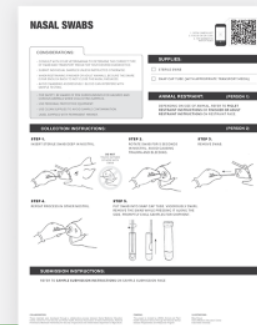


14 VIDEOS

AVAILABLE IN BOTH ENGLISH AND SPANISH

Including:
Restraint | Necropsy | Nasal Swabs
Oral Fluid Collection | Processing Fluids
Spleen | Tonsil | Tracheal Swab
Lymph Nodes | Sample Submission
Bleeding: Ear Swab | Bleeding: Finisher
Bleeding: Prewrite

PRINT HANDOUTS



15 STEP-BY-STEP HANDOUTS

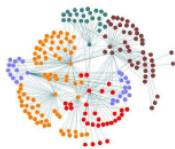
AVAILABLE IN BOTH ENGLISH AND SPANISH

Handouts correspond to videos.



NETWORK ANALYSIS: UNDERSTANDING DISEASE OUTBREAKS

Network analysis was used to determine the connections between Ontario swine herds and service suppliers to understand the emergence of porcine epidemic diarrhea virus (PEDV) in 2014.



WHAT WAS DONE AND WHAT WAS FOUND

Animal movement
Feed suppliers
Surveillance
Big data
Network analysis
Outbreak of swine industry

1 Feed Supplier
47 Direct and indirect connections with herds and service suppliers

89% of cases herds shared one single feed supplier

RESEARCH BENEFITS: CONTRIBUTIONS TO THE FUTURE

- Industry collaborations and data sharing
- Variability and velocity
- Data analysis
- Knowledge translation and transfer
- Pig health and production
- Improve herd health

CONTACT FOR MORE DETAILS:

University of Guelph
ONTARIO VETERINARY COLLEGE
DEPARTMENT OF POPULATION MEDICINE
MSc, PhD candidate
1 Department of Population Medicine, University of Guelph
2 Large Animal Clinical Sciences, University of Saskatchewan

Why You Should Carrot-All About Controlling Carrot Weevil

A. Stinson, D.B. Muldoon, M.R. McDonald, C. Scott-Dupree.

Carrots contribute the largest value to the Canadian economy of any vegetable...
...to the tune of \$130 million

There are enough carrots produced in Canada for every Canadian to consume 7 kg every year = over 100 carrots or 580 baby carrots

CARROTS ARE HEALTHY, DELICIOUS, AND... UNDER ATTACK!

Up to 40% of carrot are damaged by pests, such as the carrot weevil

Damaged carrots cannot be sold by growers

CARROT WEEVIL

Insecticide Resistance due to using one chemical for 30 years
Luckily, we have one registered alternative: NOVALURON

Climate Change = Changing biology & earlier egg-laying

WE CAN FIX THIS!

Delay seeding by 2-3 weeks
Reducing damage by 50%

Shift novaluron application 2 weeks earlier
spray carrots when they are younger and more vulnerable

Reducing damage by 300%

WHO ELSE KNOWS ABOUT THIS?

Everyone! Using KTT strategies:

EXCHANGE Ideas at conferences across Canada

DISSEMINATION of findings through posters, presentations, & publications

COLLABORATE with multiple departments, grower groups, and OMAFRA specialists

Start a DIALOGUE with local growers on feasible solutions

working towards Breeding sheep resistant to climate change

D. Naylor¹, Z. Li², B.A. Mallard³, A. Cánovas⁴, C. Baes⁵, N.A. Karrow⁶

Why we should

Climate change may cause dramatic temperature fluctuations = thermal stress

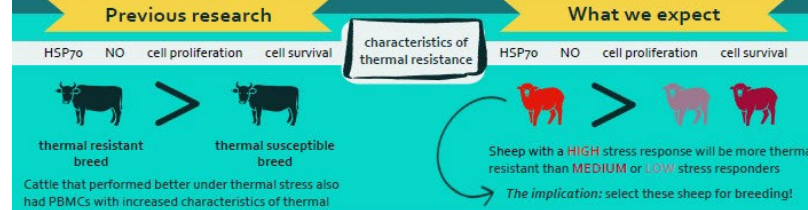
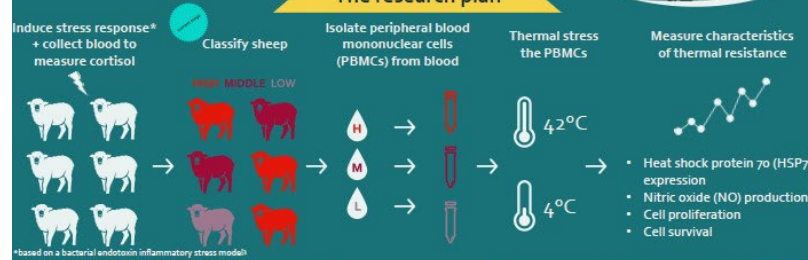
Thermal stress has negative impacts on the health and production of susceptible animals¹

The cortisol connection

Cortisol is a hormone released during times of stress to regulate metabolism and control inflammation²

Based on serum cortisol levels, sheep can be classified as a high, middle, or low stress responder³

We predict there is an optimal stress response for thermal resistance



Expecting big benefits

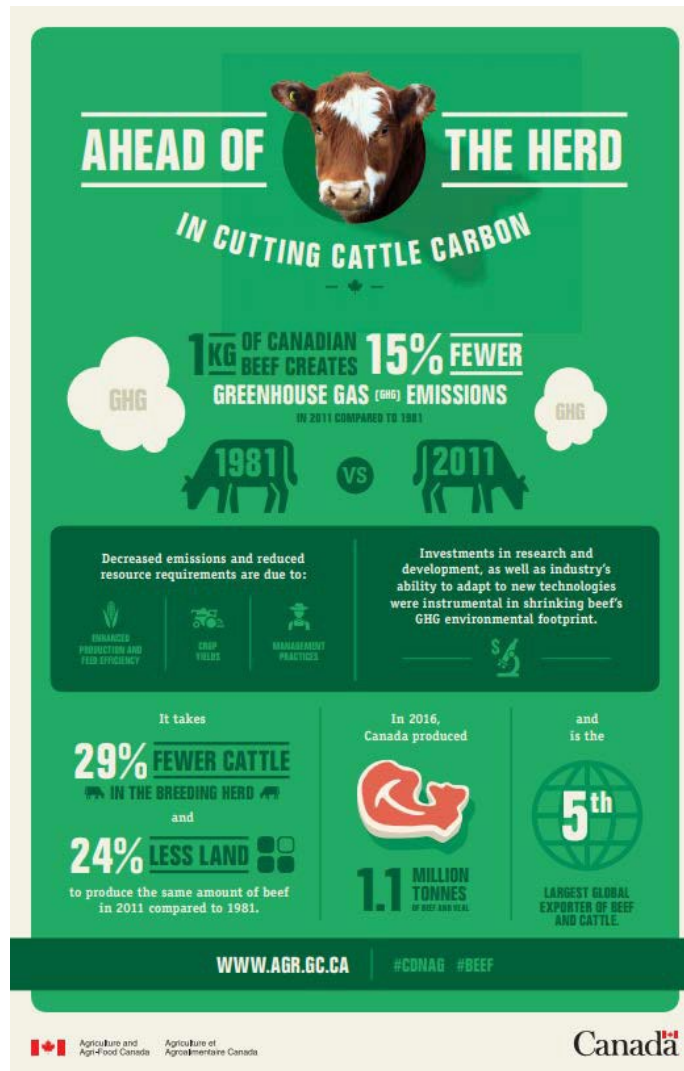
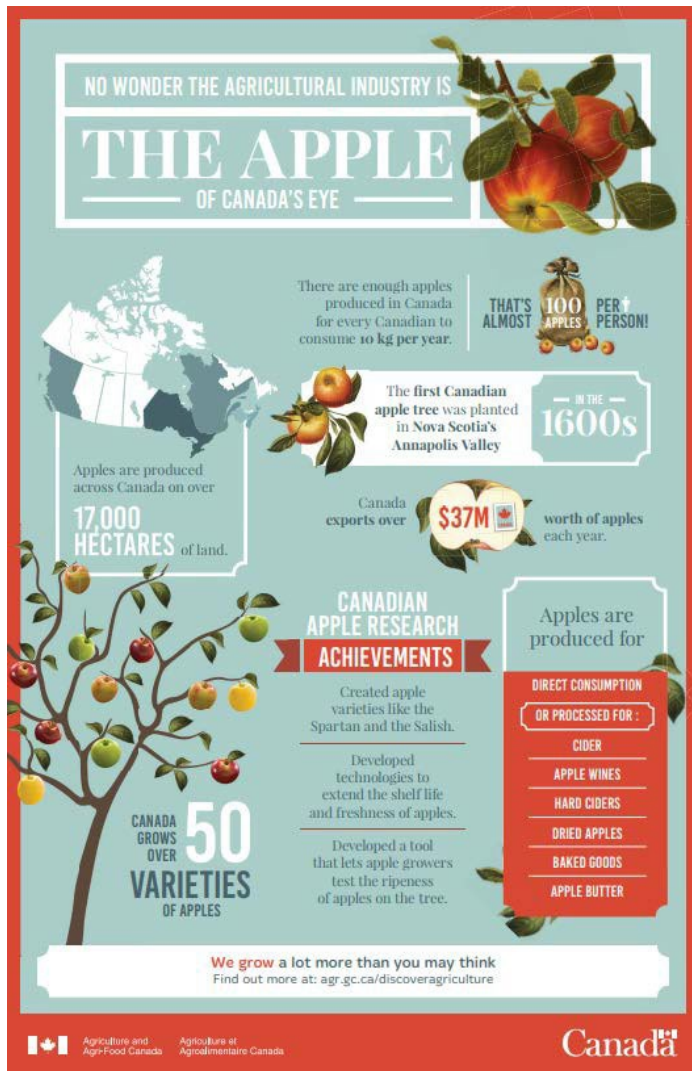
In a changing climate, we will have to breed animals that are resistant to thermal stress

Animals will be healthier and more productive

- 1 improved animal welfare
- 2 improved production efficiency
- 3 reduced use of antimicrobials

sustainably feed more people!

*Cattle for Genetic Improvement of Livestock, Department of Animal Bioscience, University of Guelph, Guelph, Ontario, Canada; ²Department of Pathology, Ontario Veterinary College, University of Guelph, Guelph, ON, Canada; ³Reference: High-Overcoming, BMJ et al. Climate change and livestock: impacts, adaptation, and mitigation. Clin Risk Manag. 2020;26(4):465-476; ⁴Morgan BJ and Martin F. Heat stress, gastrointestinal permeability and intestinal signaling—implications for ewe performance and welfare. Temperature. 2018;5(3):193-205; ⁵Yoo C, et al. Elevated corticosterone hyperemphatically mediates association with early high and low cortisol responsiveness to acute weaning challenge. VMJ. 2018; 2018;2018; ⁶Wang J, et al. Differential effect of thermal stress on HSP70 expression, nitric oxide production and cell proliferation among naive and crossbred dairy cattle. J Therm Biol. 2015;50:10-18.



AAFC Infographics

<http://www.agr.gc.ca/eng/about-us/publications/discover-agriculture/infographics-agricultural-products-and-their-impacts/?id=1530198199592> Infographics

Resources

Infographic creation –

remember size requirement
3.5' wide by 4'tall, landscape
or portrait

- Piktochart.com
- Canva.com
- Venngage.com
- Infogr.am
- PowerPoint

Colours

- Flat colour ideas:
<http://www.flatuicolorpicker.com/>
- Create colour combinations:
<http://paletton.com>
- <https://color.adobe.com/create>
- Picking map colours:
<http://colorbrewer2.org>

Contrast

- <https://contrastchecker.com/>

Resources

- **Plain language**

- Plain language editor - <http://www.hemingwayapp.com/>

- **Free images**

- <https://www.pexels.com/>
- <https://unsplash.com/>
- <https://pixabay.com/>

- **Free icons**

- <https://thenounproject.com/> – attribution depends on selection
- <http://aiconica.net/> – no attribution required
- <http://flaticons.net/> – no attribution required
- <https://www.flaticon.com/> – attribution required