

Redesigning Pharmaceutical Packaging

Members	Aim	Drugs Redesigned
Sai Vaishnavi Ramachandran Sara Shaikh Nisha Tiangratanakul	Make over the counter (OTC) medicines to be more accessible and legible for older consumers and those with visual impairments.	Pepto Bismol Tylenol NyQuil

Index

Case Study	Research	Final Product
Cough/Cold Painkillers Digestive	FDA Guidelines Key Components Innovative Packaging User Demographics Ongoing Evaluation Collaboration	Mockups and Dielines <ul style="list-style-type: none">• Tylenol• NyQuil• Pepto Bismol

Case Study #1: Cough/cold

NyQuil



Mucinex MD



Robitussin



Case Study #2: Painkillers

Advil



Aspirin



Tylenol



Case Study #3: Digestive

MiraLAX



Imodium



Pepto Bismol



FDA Guidelines

FDA Guidelines

FDA plays a vital role in ensuring the safety and efficacy of over-the-counter (OTC) medications. Their guidelines focus on clear packaging and labeling to prevent risks associated with OTC medication use.

Key Components

Accurate indications, clear dosage instructions, and prominent warnings are essential in packaging design to prevent unintended ingestion and promote safe usage.

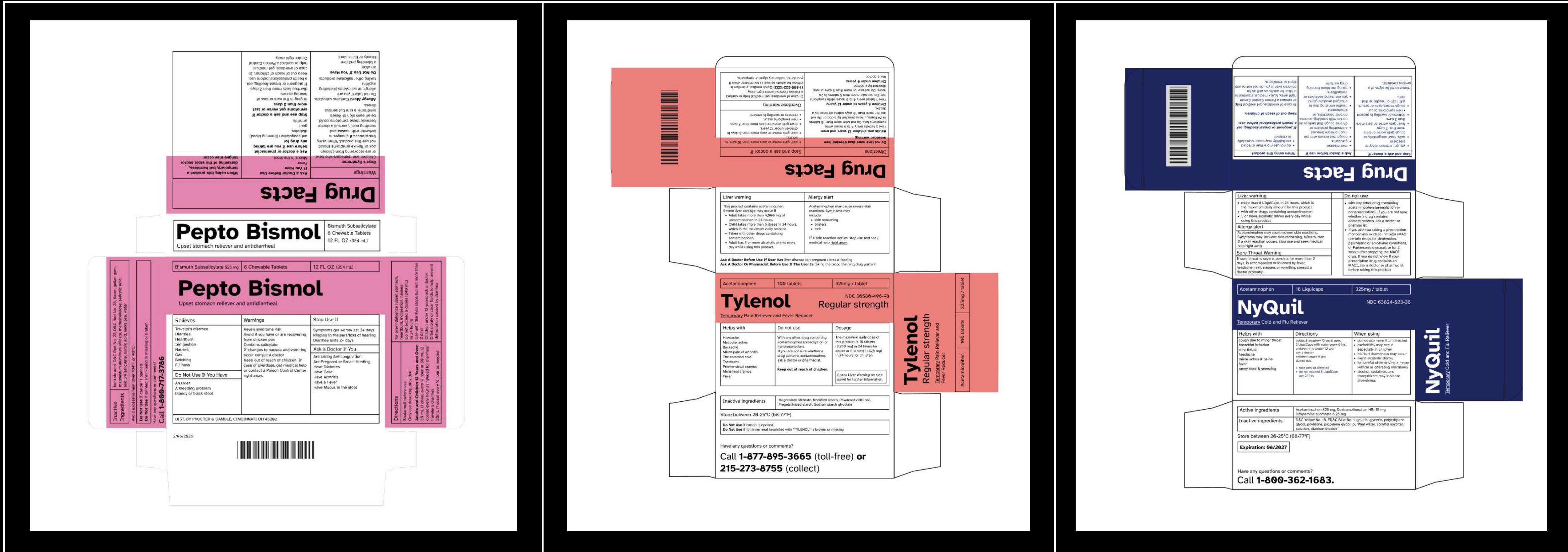
Additional Research

Innovative Packaging	User Demographics	Ongoing Evaluation	Collaboration
Research shows that innovative packaging solutions significantly enhance readability and user experience, reducing the risk of medication errors in the OTC market.	Addressing the needs of different user demographics, particularly seniors, is crucial. Senior-friendly packaging features like larger fonts and easy-open mechanisms improve usability and safety.	Continuous evaluation and refinement of FDA guidelines are essential to address emerging challenges and ensure consumer well-being in OTC medication use.	Collaboration between regulatory agencies, healthcare professionals, industry stakeholders, and consumers is key to upholding safety and effectiveness standards in OTC medication usage.

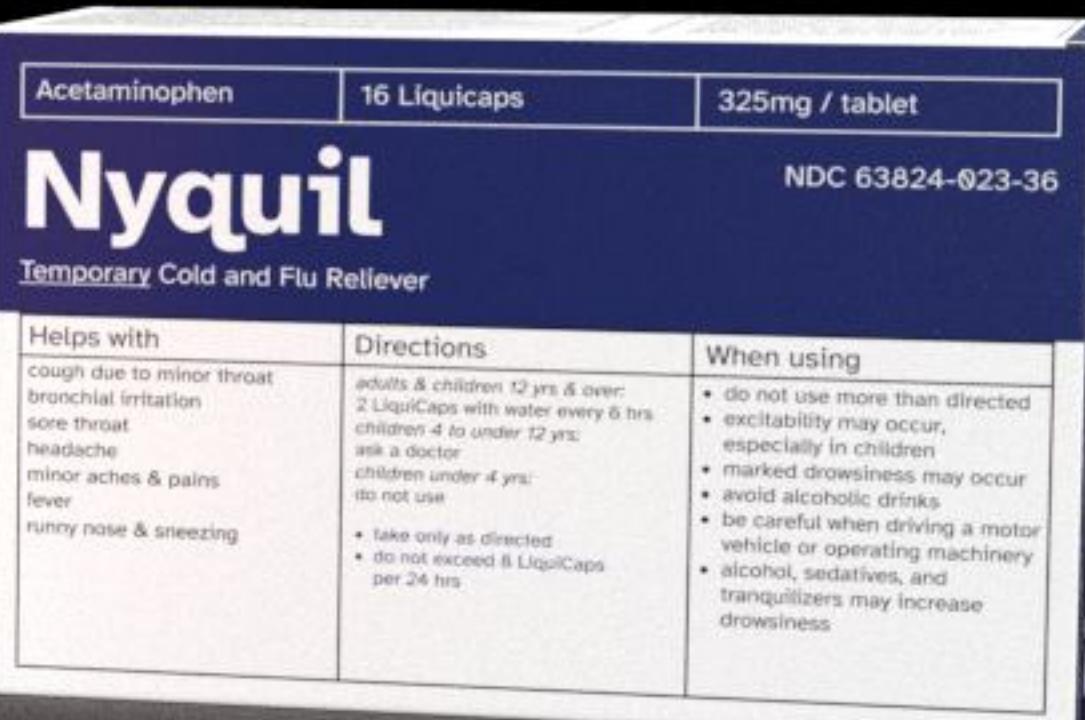
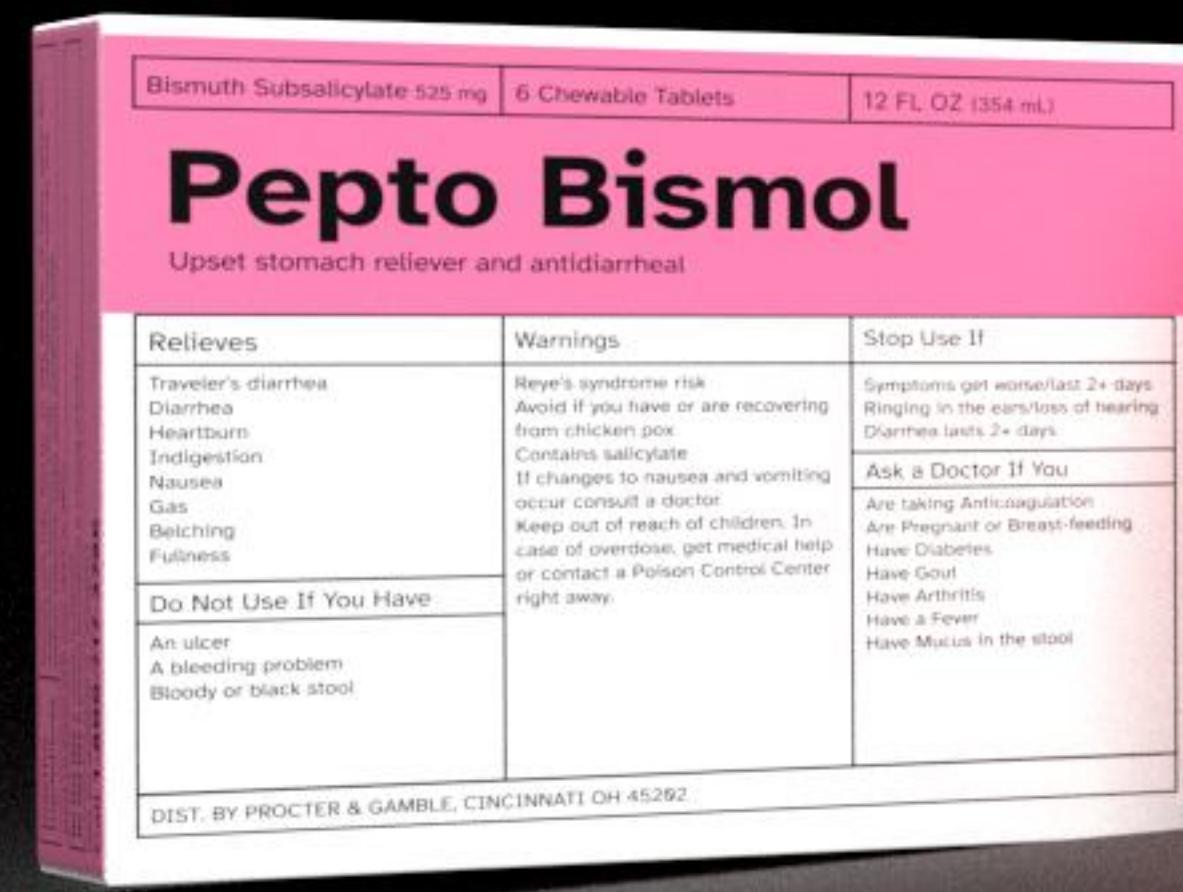
Objective of Our Project

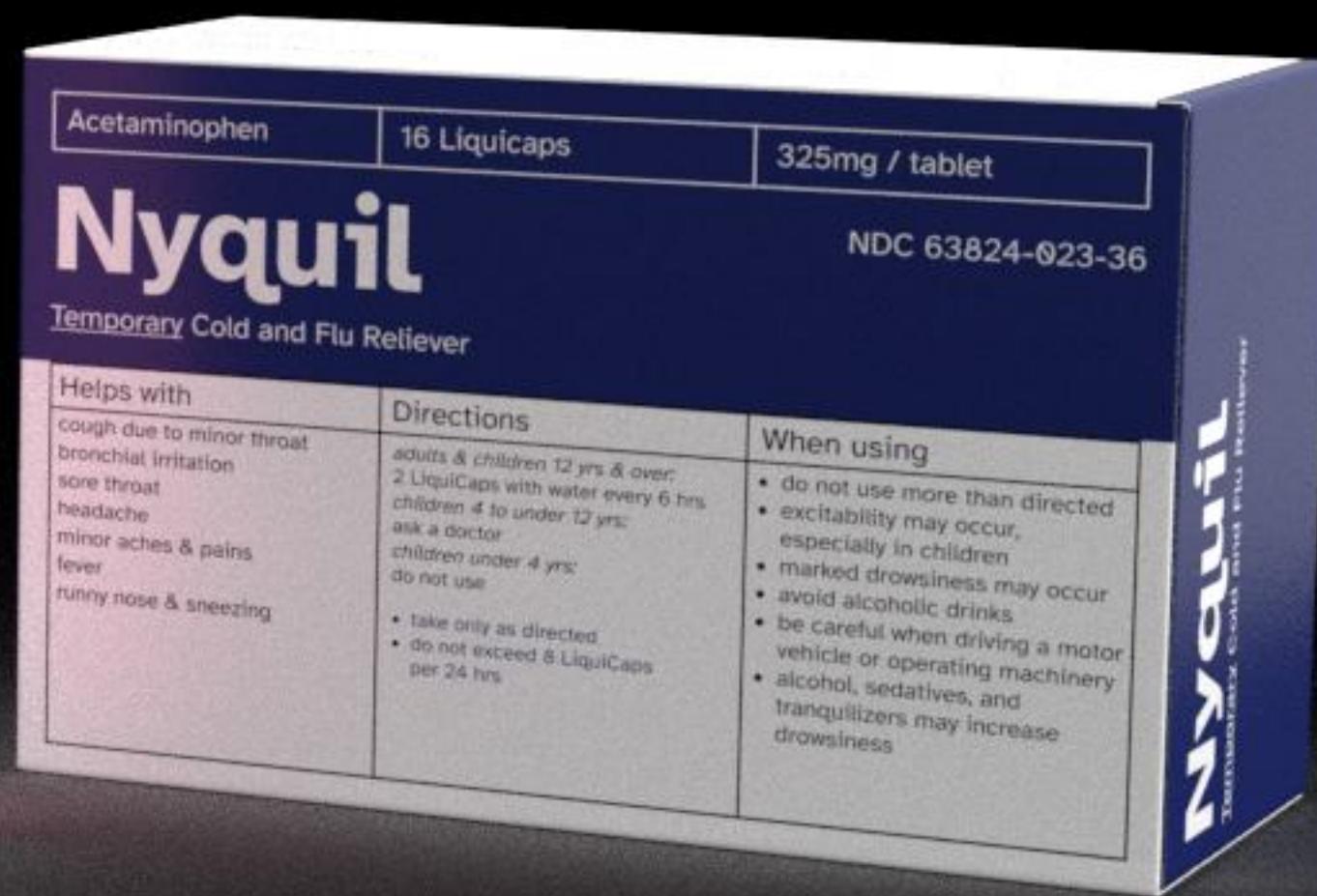
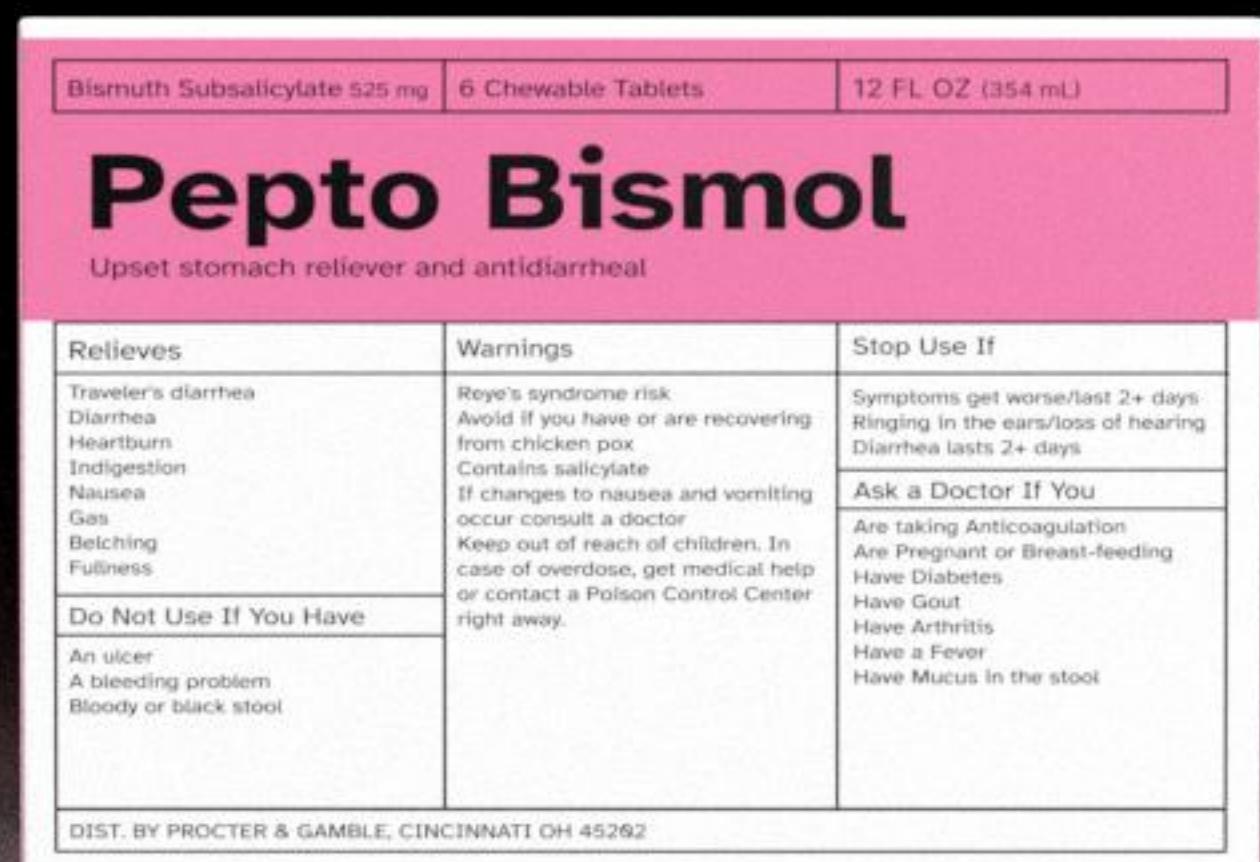
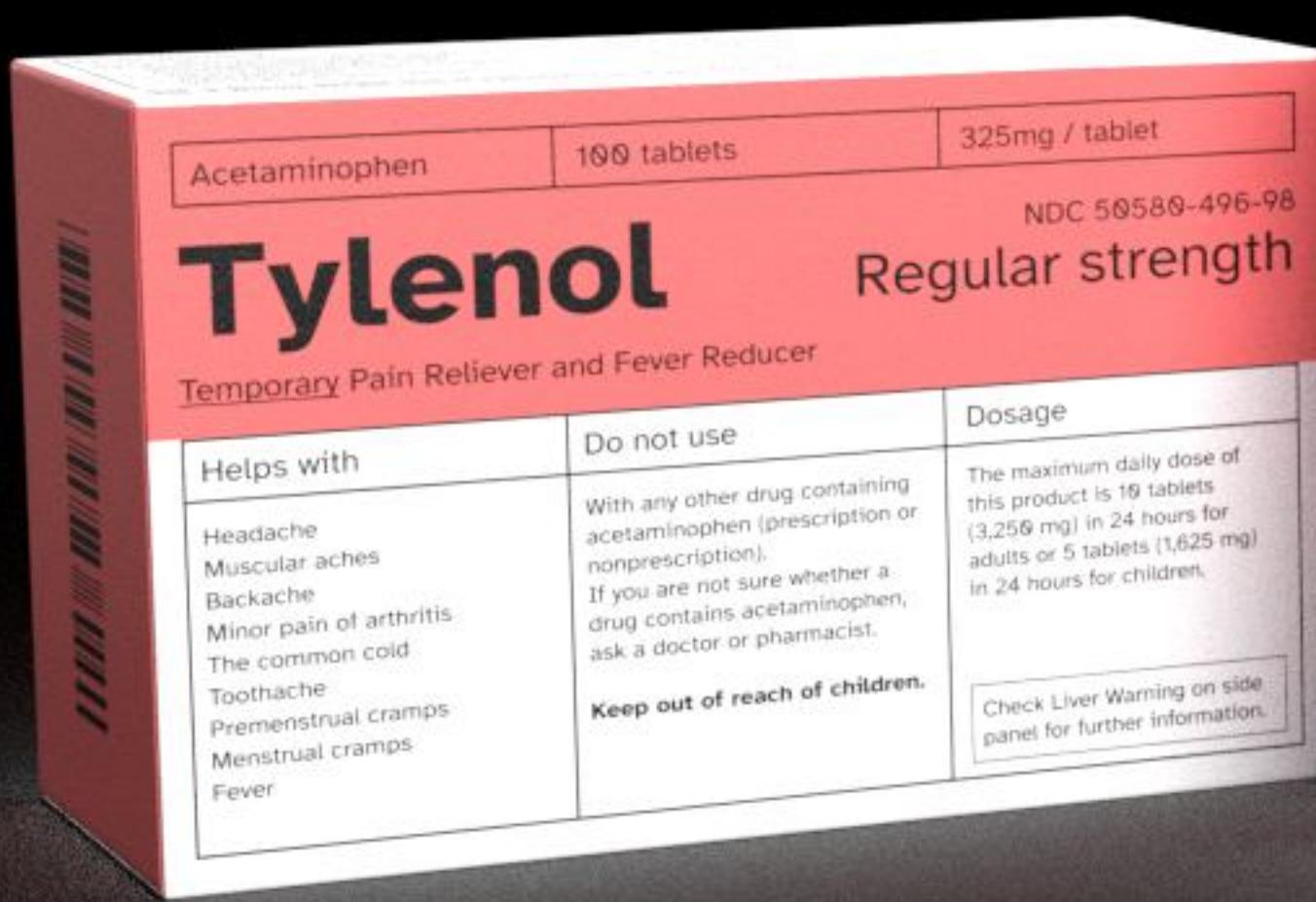
Improve Communication	Human Centric Design	Addressing Regulations
<ul style="list-style-type: none">• Enhance clarity and readability of important information.• Ensure critical details are easily understood by vulnerable populations• Prioritize organization of information on packaging.• Utilize clear typography and graphics to convey information effectively.	<ul style="list-style-type: none">• Prioritize user experience in packaging design.• Consider the needs of diverse user demographics• Create packaging that is intuitive and user-friendly.	<ul style="list-style-type: none">• Propose enhancements to existing FDA regulations governing pharmaceutical packaging.• Ensure design standards prioritize user comprehension while adhering to regulatory guidelines.• Collaborate with regulatory agencies to implement equitable design standards.• Balance regulatory requirements with the need for user-friendly packaging.

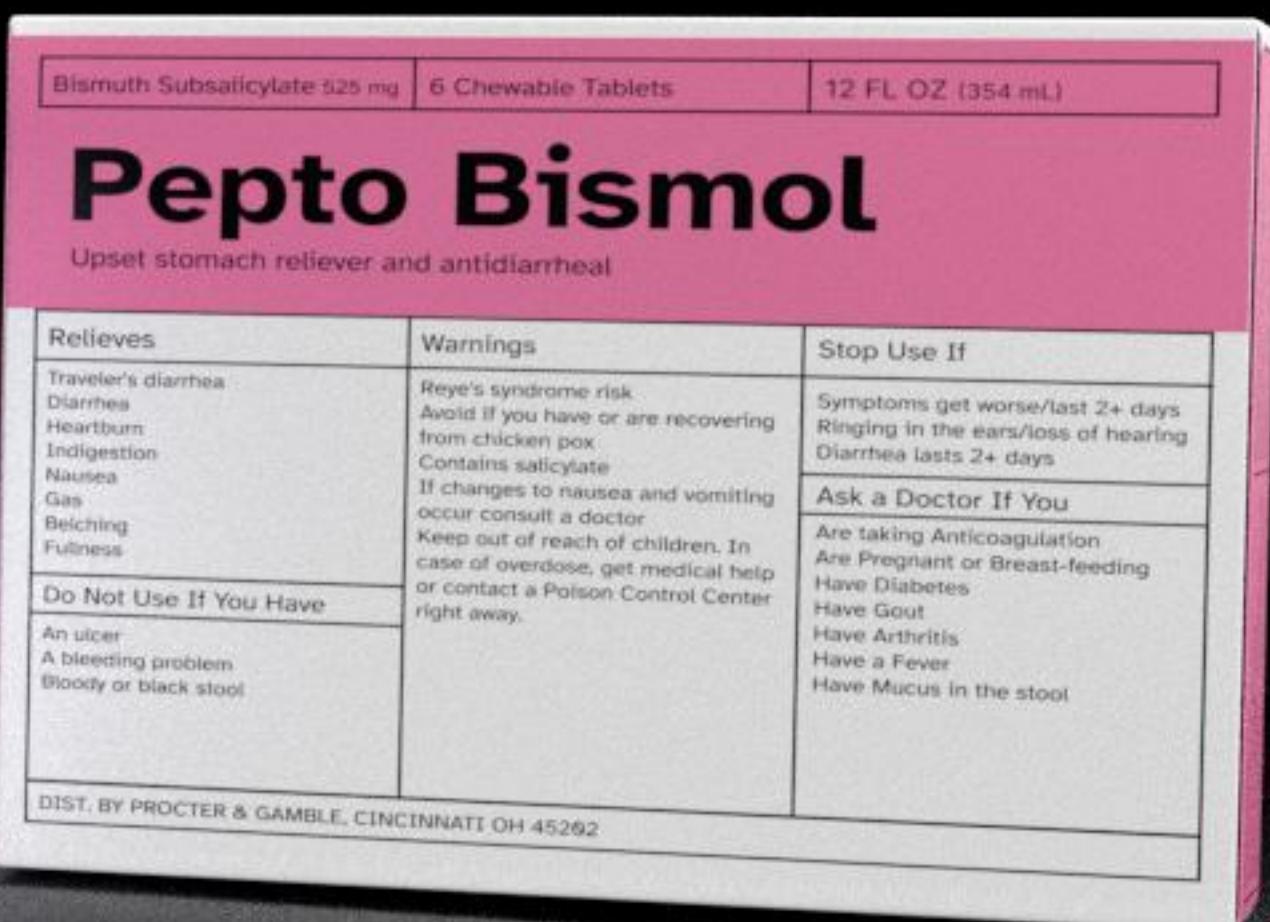
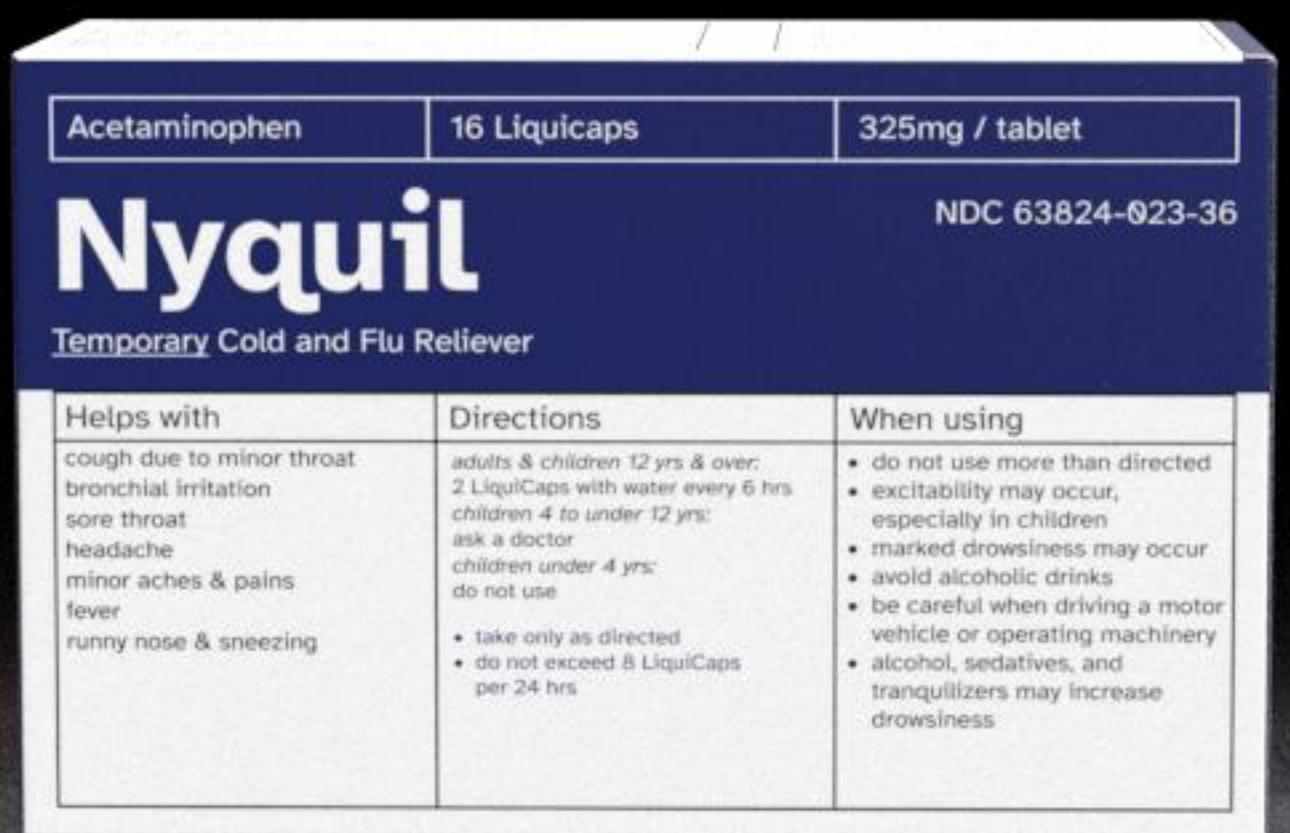
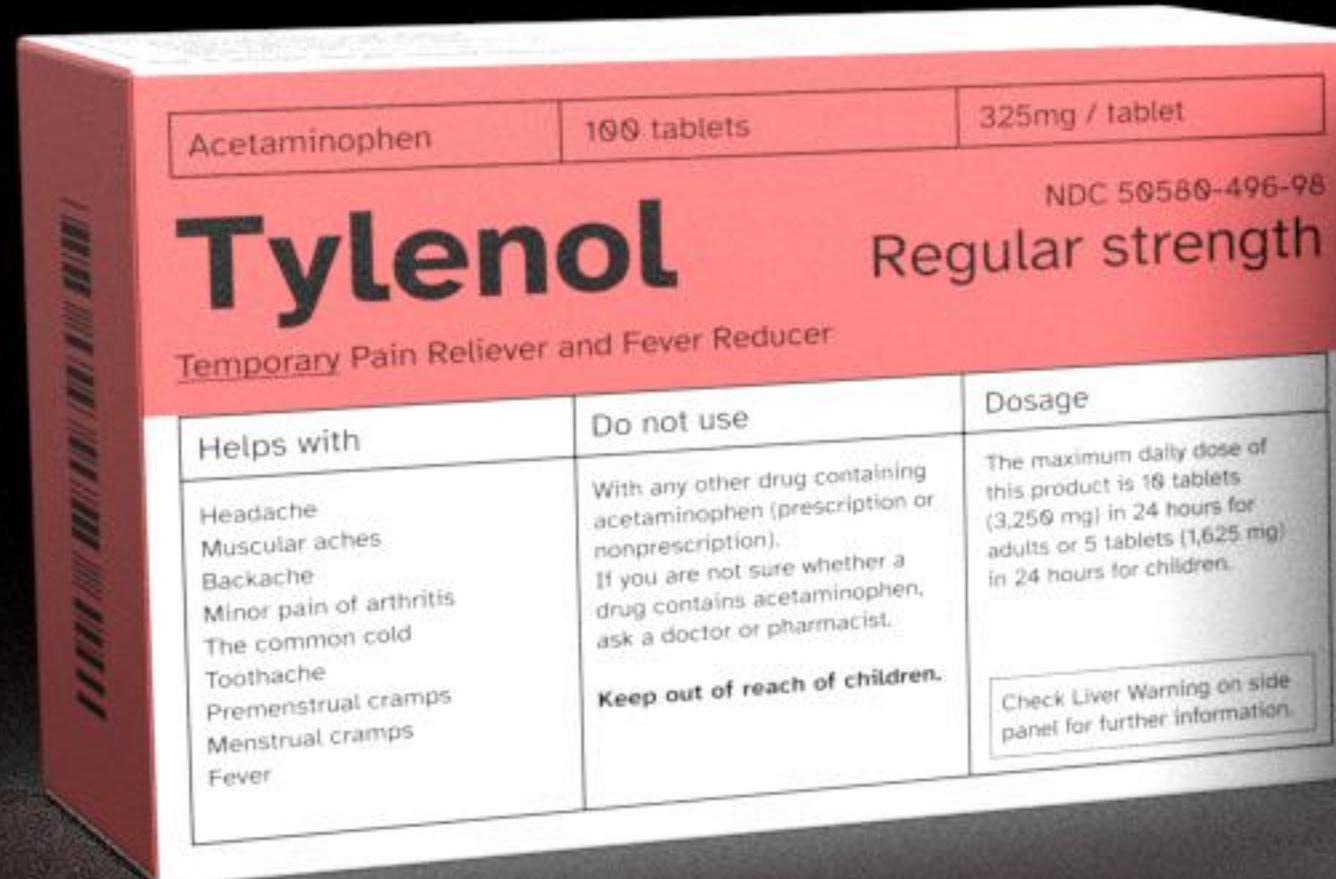
Final Redesign Layout

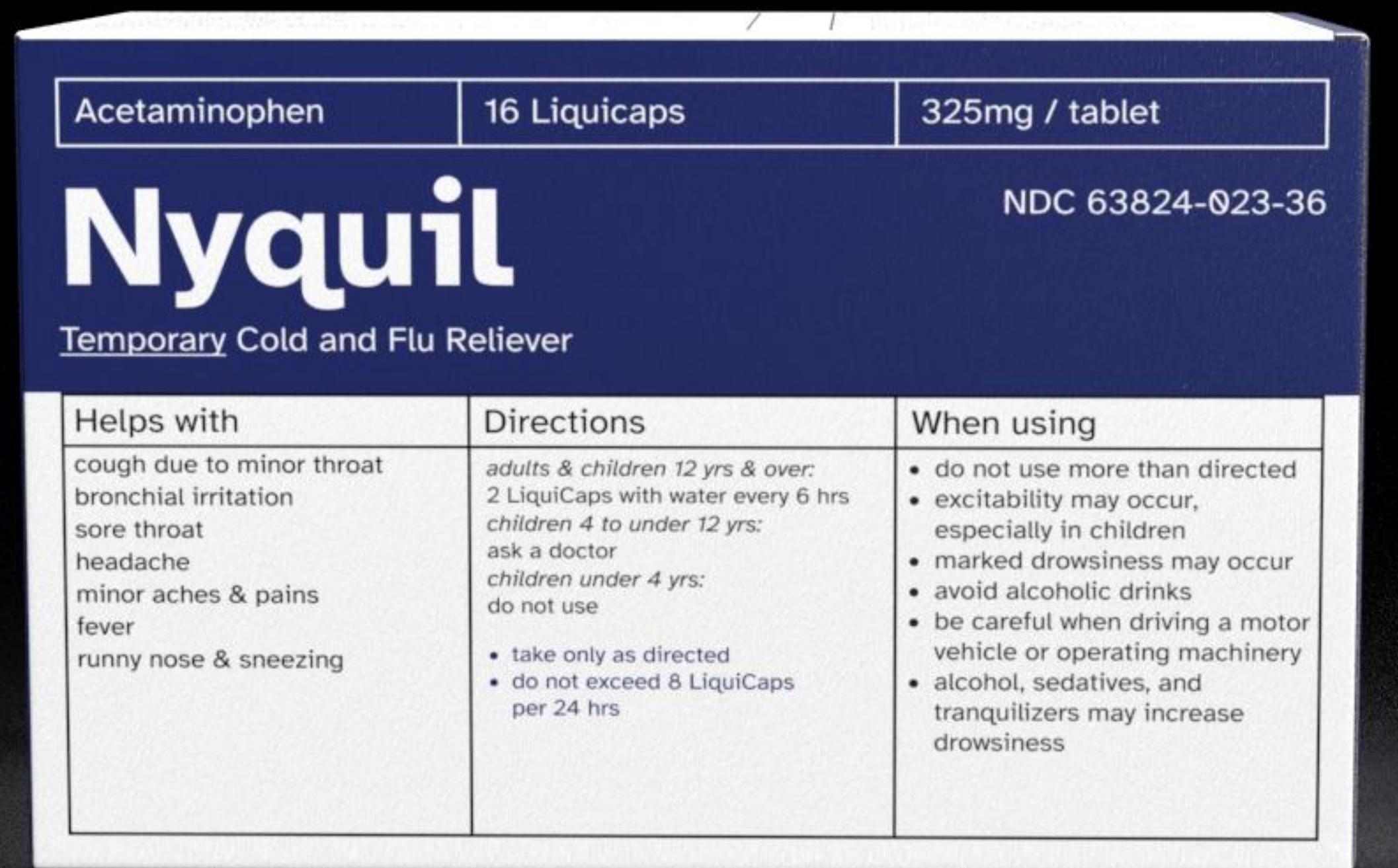














Drug Facts

Stop and ask a doctor if	Ask a doctor before use if	When using this product
<ul style="list-style-type: none">• you get nervous, dizzy or sleepless• pain, nasal congestion, or cough gets worse or lasts more than 7 days• fever gets worse or lasts more than 3 days• redness or swelling is present<ul style="list-style-type: none">• new symptoms occur• cough comes back or occurs with rash or headache that lasts. <p><small>*these could be signs of a serious condition.</small></p>	<ul style="list-style-type: none">• liver disease• glaucoma• cough that occurs with too much phlegm (mucus)• a breathing problem or chronic cough that lasts or as occurs with smoking, asthma, chronic bronchitis, or emphysema• trouble urinating due to enlarged prostate gland• you are taking sedatives or tranquilizers• taking the blood thinning drug warfarin.	<ul style="list-style-type: none">• do not use more than directed• excitability may occur, especially in children <p><i>If pregnant or breast-feeding, ask a health professional before use.</i></p> <p>Keep out of reach of children.</p> <p>In case of overdose, get medical help or contact a Poison Control Center right away. Quick medical attention is critical for adults as well as for children even if you do not notice any signs or symptoms.</p>





Nyquil

Temporary Cold and Flu Reliever

Drug Facts

Stop and ask a doctor if

- you get nervous, dizzy or sleepless
- pain, nasal congestion, or cough gets worse or lasts more than 7 days
- fever gets worse or lasts more than 3 days
- redness or swelling is present
- new symptoms occur
- cough comes back or occurs with rash or headache that lasts.

*these could be signs of a serious condition.

Ask a doctor before use if

- liver disease
- glaucoma
- cough that occurs with too much phlegm (mucus)
- a breathing problem or chronic cough that lasts or as occurs with smoking, asthma, chronic bronchitis, or emphysema
- trouble urinating due to enlarged prostate gland
- you are taking sedatives or tranquilizers
- taking the blood thinning drug warfarin

In case of overdose, get medical help or contact a Poison Control Center right away. Quick medical attention is critical for adults as well as for children even if you do not notice any signs or symptoms.

When using this product

- do not use more than directed
- excitability may occur, especially in children

If pregnant or breast-feeding, ask a health professional before use.

Keep out of reach of children.

Drug Facts

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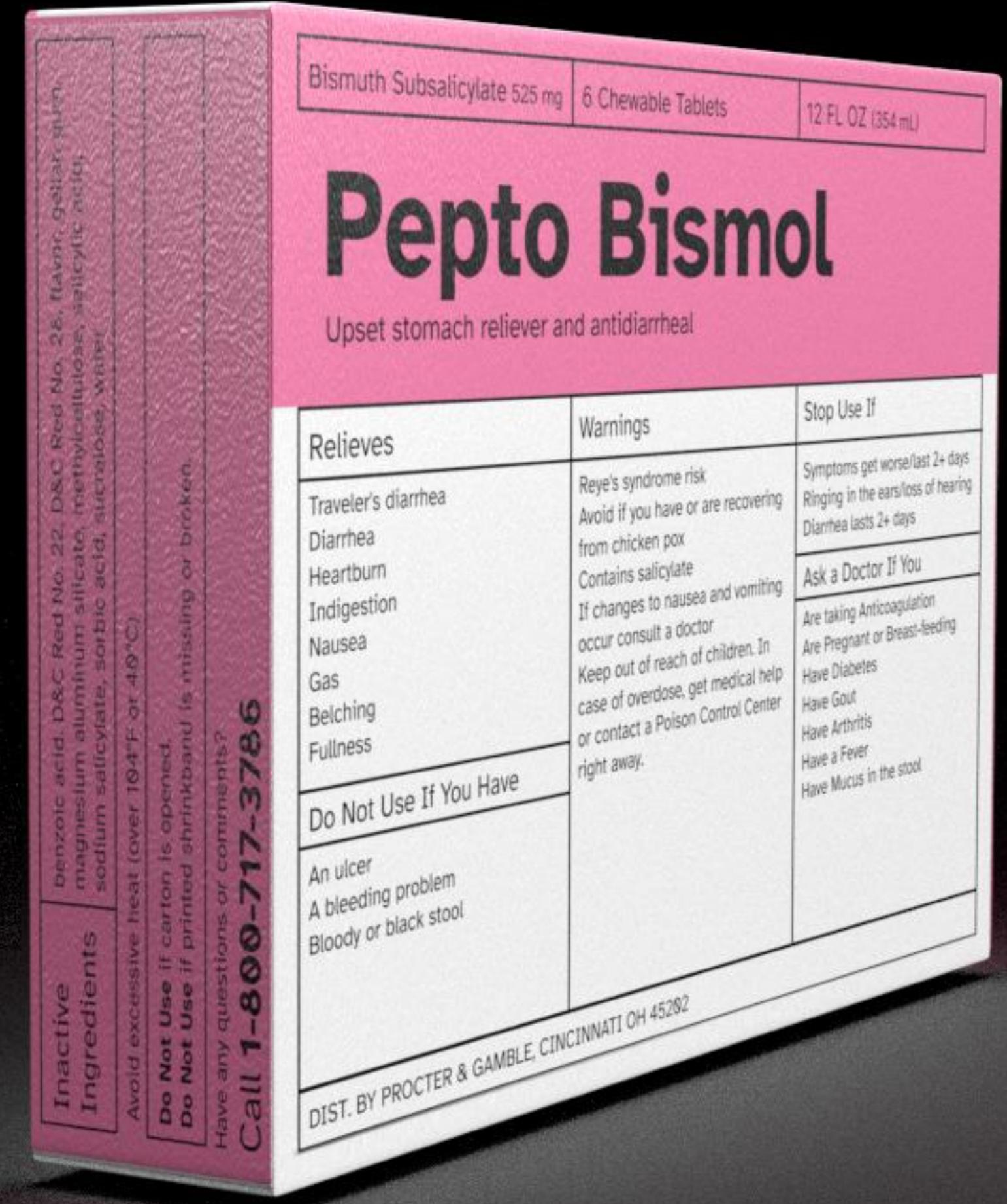
Bismuth Subsalicylate 525 mg | 6 Chewable Tablets | 12 FL OZ (354 mL)

Pepto Bismol

Upset stomach reliever and antidiarrheal

Relieves	Warnings	Stop Use If
Traveler's diarrhea Diarrhea Heartburn Indigestion Nausea Gas Belching Fullness	Reye's syndrome risk Avoid if you have or are recovering from chicken pox Contains salicylate If changes to nausea and vomiting occur consult a doctor Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.	Symptoms get worse/last 2+ days Ringing in the ears/loss of hearing Diarrhea lasts 2+ days
Do Not Use If You Have		Ask a Doctor If You
An ulcer A bleeding problem Bloody or black stool		Are taking Anticoagulation Are Pregnant or Breast-feeding Have Diabetes Have Gout Have Arthritis Have a Fever Have Mucus in the stool

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Drug Facts

Warnings

Reye's Syndrome:

Children and teenagers who have or are recovering from chicken pox or flu-like symptoms should not use this product. When using this product, if changes in behavior with nausea and vomiting occur, consult a doctor because these symptoms could be an early sign of Reye's syndrome, a rare but serious illness.

Allergy Alert: Contains salicylate. Do not take if you are allergic to salicylates (including aspirin) taking other salicylate products.

Do Not Use If You Have
an ulcer
a bleeding problem
bloody or black stool

Ask a Doctor Before Use
If You Have:
Fever
Mucus in the stool

Ask a doctor or pharmacist before use if you are taking any drug for
anticoagulation (thinning blood)
diabetes
gout
arthritis

Stop use and ask a doctor if symptoms get worse or last more than 2 days
ringing in the ears or loss of hearing occurs
diarrhea lasts more than 2 days
If pregnant or breast-feeding, ask a health professional before use.
Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.

When using this product a temporary, but harmless, darkening of the stool and/or tongue may occur

Inactive Ingredients benzoin, D&C Red No. 22, D&C Red No. 2B, flavor, gelatin, gum, magnesium aluminum silicate, methylcellulose, sucralose, sorbic acid, sodium salicylate, water
Avoid excessive heat (over 104°F or 40°C).

Do Not Use if carton is opened.
Do Not Use if printed shrinkband is missing or broken.
Have any questions or comments?
Call 1-800-717-3786



Drug Facts

Warnings	Ask a Doctor Before Use If You Have	When using this product a temporary, but harmless, darkening of the stool and/or tongue may occur
<p>Reye's Syndrome: Children and teenagers who have or are recovering from chicken pox or flu-like symptoms should not use this product. When using this product, if changes in behavior with nausea and vomiting occur, consult a doctor because these symptoms could be an early sign of Reye's syndrome, a rare but serious illness.</p> <p>Allergy Alert: Contains salicylate. Do not take if you are allergic to salicylates (including aspirin) taking other salicylate products</p> <p>Do Not Use If You Have an ulcer a bleeding problem bloody or black stool</p>	<p>Fever Mucus in the stool</p> <p>Ask a doctor or pharmacist before use if you are taking any drug for anticoagulation (thinning blood) diabetes gout arthritis</p> <p>Stop use and ask a doctor if symptoms get worse or last more than 2 days</p> <p>ringing in the ears or loss of hearing occurs diarrhea lasts more than 2 days If pregnant or breast-feeding, ask a health professional before use. Keep out of reach of children. In case of overdose, get medical help or contact a Poison Control Center right away.</p>	





Acetaminophen

100 tablets

325mg / tablet

Tylenol

NDC 50580-496-98

Regular strength

Temporary Pain Reliever and Fever Reducer

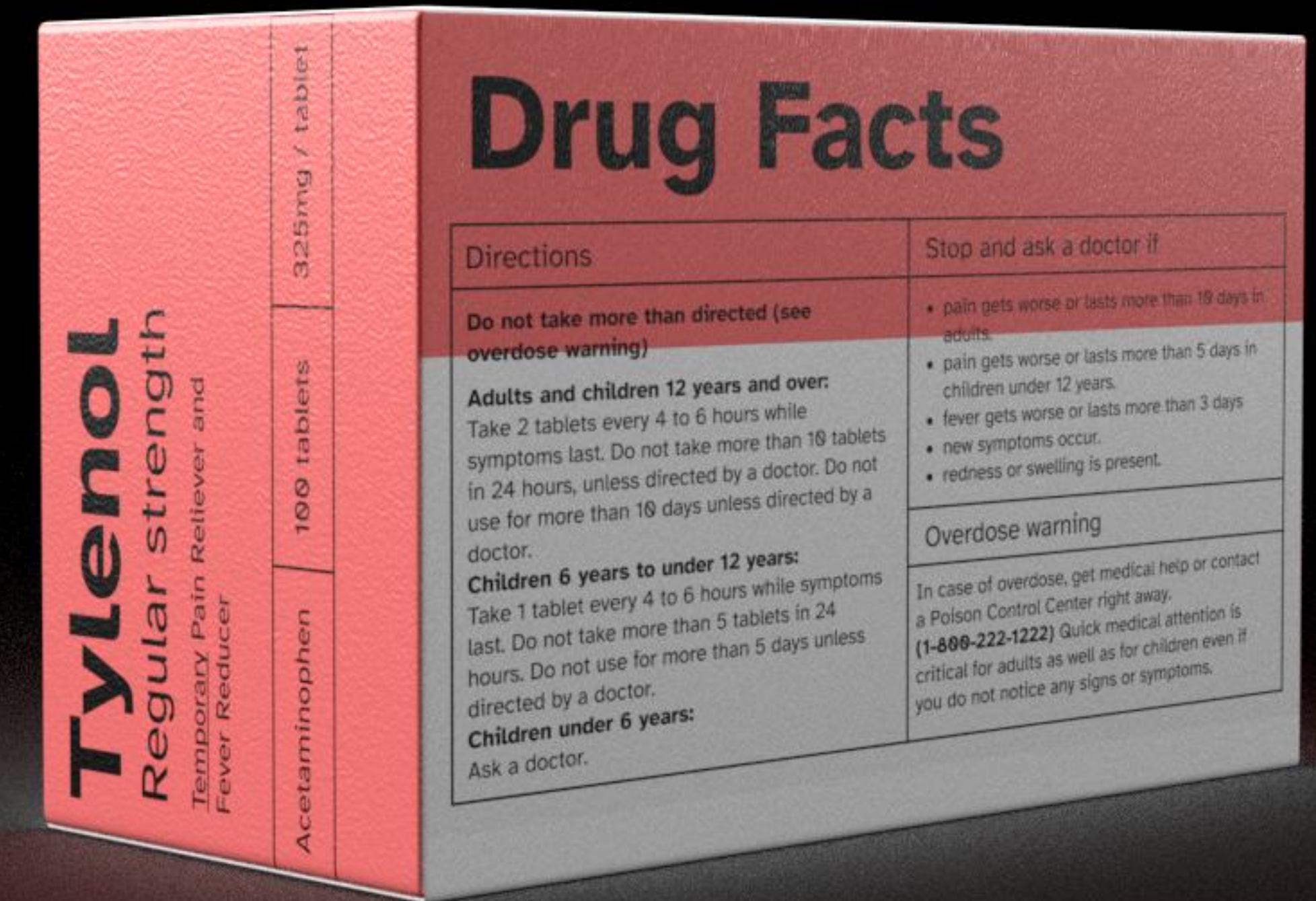
Helps with	Do not use	Dosage
Headache Muscular aches Backache Minor pain of arthritis The common cold Toothache Premenstrual cramps Menstrual cramps Fever	With any other drug containing acetaminophen (prescription or nonprescription). If you are not sure whether a drug contains acetaminophen, ask a doctor or pharmacist. Keep out of reach of children.	The maximum daily dose of this product is 10 tablets (3,250 mg) in 24 hours for adults or 5 tablets (1,625 mg) in 24 hours for children. Check Liver Warning on side panel for further information.



Drug Facts

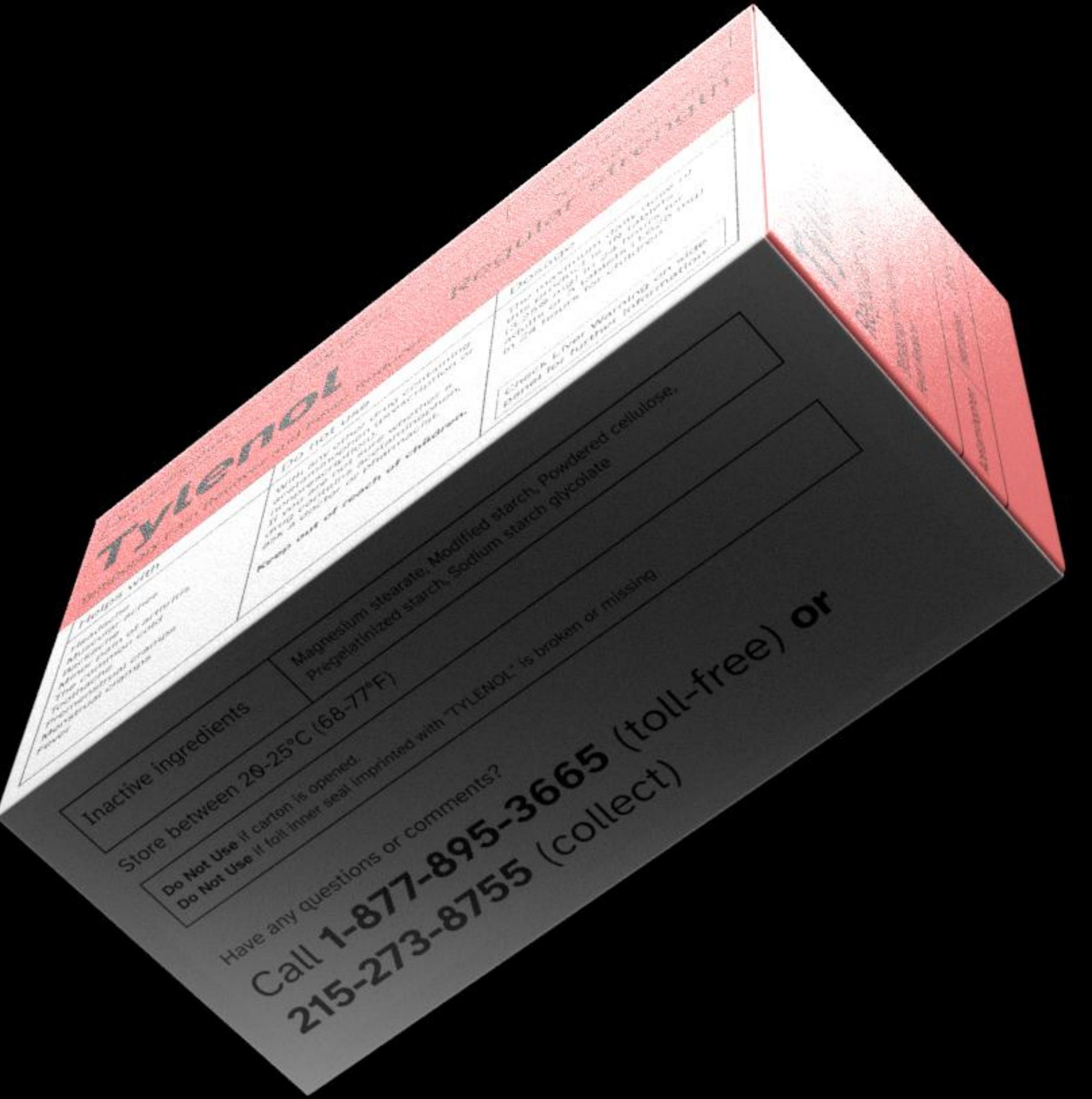
Directions	Stop and ask a doctor if
<p>Do not take more than directed (see overdose warning)</p> <p>Adults and children 12 years and over: Take 2 tablets every 4 to 6 hours while symptoms last. Do not take more than 16 tablets in 24 hours, unless directed by a doctor. Do not use for more than 10 days unless directed by a doctor.</p> <p>Children 6 years to under 12 years: Take 1 tablet every 4 to 6 hours while symptoms last. Do not take more than 5 tablets in 24 hours. Do not use for more than 5 days unless directed by a doctor.</p> <p>Children under 6 years: Ask a doctor.</p>	<ul style="list-style-type: none">• pain gets worse or lasts more than 10 days in adults.• pain gets worse or lasts more than 5 days in children under 12 years.• fever gets worse or lasts more than 3 days• new symptoms occur.• redness or swelling is present.
	Overdose warning
	<p>In case of overdose, get medical help or contact a Poison Control Center right away. (1-800-222-1222) Quick medical attention is critical for adults as well as for children even if you do not notice any signs or symptoms.</p>











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