

The MEMORY reVITALIZER HOUR #  
with Dr. William Summers  
(CALL-in, 505 -444- 5059) SAT February 24, 2024.

Quotes & Quips HUMOR & WISDOM  
TOPICS:KOREAN MD's; HOME PHARM; This Yr's  
Flu; covid19vaccine: Methylene Blue,Vick's Vapor  
Rub;osteoprosis; Food/ Diabetes; HFCS; TBI  
memory.

- Political language is designed to make lies sound truthful , murder respectable and give an appearance of solidity to “PURE WIND”.  
– GEORGE ORWELL
- One useless man is a shame, two is a law firm, and THREE is a Congress -- JOHN ADAMS
- The more you KNOW, the more you know you DO NOT KNOW.  
– Aristotle
- there are TWO WAYS TO CONQUER & ENSLAVE A COUNTRY. ONE is by the sword, the OTHER IS BY DEBT.  
– JOHN ADAMS
- DO NOT complain about growing old. It is a privilege denied to many.  
– Mark Twain
- POWER ALWAYS THINKS.... THAT IT IS DOING GOD'S SERVICE, WHEN IT IS VIOLATING ALL OF GOD'S LAWS.  
– JOHN ADAMS
- 'Why do you need God, when you have us, the Democrats"  
– Nancy Pelosi

*IN THESE TROUBLED TIMES REMEMBER,  
FEAR IS A REACTION..  
... COURAGE IS A DECISION.*

**THE PURPOSE OF THIS SHOW IS TO  
EDUCATE AND EMPOWER YOU  
THE LISTENER**

**I MAKE THE COMPLEX UNDERSTANDABLE EACH &  
EVERY SHOW. -R. Limbaugh**

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## Military hospital emergency rooms open doors to public as doctors walk out

- <https://www.msn.com/en-us/news/world/military-hospital-emergency-rooms-open-doors-to-public-as-doctors-walk-out/ar-BB1iyu0y?ocid=msedgntp&pc=HCTS&cvid=74266a48ed264754af86795d18e7ec92&ei=53>

SEOUL, Feb. 20 (Yonhap) -- The emergency rooms of military hospitals nationwide opened their doors to the public in full scale Tuesday as trainee doctors in the civilian sector walked off the job in protest of the government's plan to increase the number of medical students.

As of Monday, 6,415 trainee doctors had submitted their resignations, with about 1,600 of them walking off the job to protest the plan to add 2,000 to the country's medical school enrollment quota next year, a sharp rise from the current 3,058 seats.

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### YOUR HOME PHARMACY

Let me start with  
Aspirin , Tylenol,  
some Motrin like NASAID,  
Peptobismol,  
Immodium, Dramamine,  
Kaopectate                      metholatum,                      Vick's vapor rub,  
vasoline,  
a few antibiotics,  
Lasix....                      HCTZ

1" tape, 91%Isopropyl alcohol,  
Q-tips, cotton pads,  
4'x4' and other gauze pads,  
Ace wraps,

3-month BACK-UP OF YOUR MEDS

Ace Wraps            BAND-AIDES

FLASHLIGHT & Batteries

LIGHTER,                    MASKS                    GLOVES,  
ANTACIDS                    BENADRYL

Alternative products:

Ginger, Oil of Oregano,            Tea tree Oil,            zinc,  
vitamin C,                    Magnesium,                    Potassium,  
Coconut oil.

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## This year's Flu

If you suspected this flu season is rougher than previous ones, you're not imagining it. Last season, flu activity had already peaked and was on the downfall by early January. This year, influenza continues to surge across the country and send tens of thousands of people to the doctor.

Flu estimates from the U.S. Centers for Disease Control and Prevention suggest that 20 million to 39 million people have been sickened by the flu, up to 18 million have visited a doctor, up to 490,000 have been hospitalized and anywhere from 14,000 to 43,000 have died so far this flu season, from Oct. 1 to Jan. 27.

"That is a large impact from this season," noted Alicia Budd, the CDC's team lead for domestic flu surveillance.

Though it's tough to pinpoint any single reason for this season's bustling flu activity, flu experts shed light here on what's going on — and why this flu season is setting records.

The first thing doctors are seeing this flu season: a lot of hospitalizations. The hospitalization rate recorded at the end of December was the the **third-highest peak for flu-related hospitalizations recorded since the 2010-2011 flu season**, according to Dr. Robert H. Hopkins Jr., the medical director of the National Foundation for Infectious Diseases (NFID).

The cumulative hospitalization rate for the season is currently **47.8 per 100,000 people** — that's the fourth-highest rate for this time of year since the 2010-11 season.

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## **Vaccinated People Can Still Transmit Disease, FDA and CDC Officials Admit**

by Marina Zhang Epoch Times Feb 15 2024

- Public health officials from the Food and Drug Administration (FDA) and the Centers for Disease Control and Prevention (CDC) admitted that people vaccinated with the COVID-19 vaccine can still get COVID and can transmit COVID at a Feb. 15 congressional hearing.
- “COVID vaccines are the most closely monitored vaccines that have ever been rolled out in U.S. history,” Dr. Jernigan said. He listed five systems that are tracking COVID-19 vaccine safety data.

- However, Rep. Debbie Lesko (R-Ariz.), during her five minutes for questioning, gave an example of a former constituent who was diagnosed as having Guillain Barre syndrome from his COVID vaccination, but two years later, has not yet received any response from VAERS nor CICP. She also mentioned a case in New York where a family is struggling to update the status of a VAERS ID from hospitalized to deceased on the database.

## Methylene Blue:

### Origins and Early Use

If you've ever worn **DENIM JEANS**, the chances are high that Methylene Blue was used in some form in its production.

Methylene Blue has an intriguing history in – believe it or not — **TEXTILES** dating back to its discovery during the mid-19th century.

It actually revolutionized textile production processes at that time. Methylene Blue's unparalleled ability to impart an exquisite blue hue quickly made it a beloved component of fashion and style. From luxurious garments worn by aristocrats, to intricately patterned fabrics used by mass populations, its brilliant presence enchanted the world. At that time, no one knew that Methylene Blue would soon emerge as a transformative force in medicine – specifically cancer treatments.

Methylene Blue's vibrant blue hue instantly attracted the attention of scientists and physicians. It quickly made a bold and significant move into healthcare due to its unique properties and therapeutic potential. And scientists are still uncovering the impacts of this unique compound today.

**Diagnostic Tool:**

Methylene Blue serves an invaluable diagnostic function in emergency medicine. When suspected gastrointestinal leakage exists, for example, Methylene Blue can be taken orally or intravenously to detect potential abnormalities in the digestive tract and detect leaks or abnormal connections that enable healthcare providers to provide accurate diagnoses and prompt interventions. Its vivid blue hue helps healthcare providers easily spot potential leaks or abnormal connections within it for accurate diagnoses and fast intervention.

Methylene Blue in Emergency Medicine Countering Poisonings: Methylene Blue's primary use in emergency medicine is as an antidote against poisonings, such as **CARBON MONOXIDE POISONING**, **CYANIDE POISONING** or **methemoglobinemia**. By helping convert toxic compounds to safe ones and restore cell functioning in emergency room patients, Methylene Blue plays an essential role.

Methylene Blue's effectiveness as an antidote lies in its unique property as a redox agent, aiding electron transfer and supporting detoxification processes. When faced with carbon monoxide poisoning, Methylene Blue forms a strong bond with carbon monoxide molecules to safely eliminate them from the body; while in cases of cyanide poisoning it helps convert toxic cyanide ions to less dangerous forms reducing risks of severe toxicity. Furthermore, its role in treating methemoglobinemia – an abnormal oxygen-carrying capacity of blood – speaks volumes of Methylene Blue's effectiveness as an emergency medical countermeasure.

Supercharging Cell Energy: Methylene Blue is like a power-up for our cell's energy factories, the hard-working mitochondria. It fine-tunes their performance during a process called oxidative phosphorylation, acting as a conductor that helps electrons flow smoothly. This boosts

cell respiration and unleashes maximum energy production, allowing our cells to thrive and operate at their peak efficiency.

### **Anticancer Potential**

Exciting new research indicates that Methylene Blue can selectively target and inhibit mitochondrial function within cancer cells, leading to compromised energy production and compromised viability. While more investigation may be required, these preliminary results indicate its possible future use as a cancer therapy treatment solution.

This phenomenon is particularly interesting in light of **Photodynamic Therapy's** breakthrough in cancer care. Photodynamic Therapy (PDT) is an innovative and noninvasive cancer therapy which employs light to destroy cancer cells using special compounds called photosensitizing agents that accumulate more in cancerous cells due to how cancerous tissues use blood than healthy ones. PDT agents can either be given orally or intravenously and work best when given regularly throughout treatment sessions, providing constant exposure.

Once photosensitizing agents have built up in a tumor, they go dormant. PDT begins when specific wavelengths of visible or near-infrared light is introduced directly onto it from external devices or even internally through fiber-optic cables depending on where exactly the tumor lies.

Light interacts with photosensitizing agents to induce a chemical reaction that produces reactive oxygen species (ROS). ROS molecules act like powerful weapons against cancer cells by damaging proteins, fats and DNA structures – leading to stress for them and ultimately leading to programmed cell death.

PDT therapy is highly selective due to the fact that photosensitizing agents tend to accumulate more in cancer cells than healthy ones, enabling PDT to target cancerous ones while sparing healthy ones and tissues around them.

Cancer cells feature unique characteristics like increased blood vessel formation and altered metabolism that cause this effect; when light activates these agents, reactive oxygen species are produced, creating a targeted attack against cancer cells.

PDT has demonstrated tremendous promise in treating various forms of cancer, most commonly skin cancers like basal cell carcinoma, squamous cell carcinoma and actinic keratosis. PDT also shows great promise when used against lung, esophageal, bladder and gastrointestinal cancers; researchers are currently exploring its use against head-and-neck, prostate and brain tumors.

— <https://templetonwellness.com/articles/methylene-blue-cancer-breakthrough/>

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NEWS BREAK:

## **SMELLING VICKS VAPORUB COULD HELP EASE DEPRESSION, NEW STUDY SUGGESTS**

by Cassidy Morrison, Feb 13, 2024 Daily Mail

- Smelling familiar scents to evoke memories could potentially assist in recovery
- Vicks Vaporub, coffee and some hand soaps were among most effective

Neuroscientists from the University of Pittsburgh found that patients who sniffed 12 recognizable scents had better access to positive memories - stopping negative thought patterns that perpetuate the mental illness.

The participants recalled specific memories from their lives when they smelled Vicks Vaporub, coffee, vanilla extract, lavender hand soap, and more common household items.

For their study, neuroscientists enrolled 32 people aged 18-55 with major depression. They were exposed to 12 smells in airtight jars along with a written clue as to the scent.

Scents included coconut oil, cumin powder, clove bulbs, red wine, wax shoe polish, vanilla extract, ketchup, and orange essential oil.

Each participant rated memories on how good or bad it made them feel, how exciting it was, how clear it was, and how often they thought about it. They were then asked to identify each scent but were told it wasn't important to get it right.

Participants identified the smells correctly about 29 percent of the time on average. Smells evoked more specific memories from their lives than word cues. For instance, hearing the word 'menthol' was far less evocative than opening a jar and smelling Vicks Vaporub.

The olfactory bulb, responsible for processing smells, directly connects to key brain regions associated with memory and emotion, such as the amygdala and hippocampus.

- published in the journal JAMA Network

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## **Study Finds: Moderate Impacts in Daily Physical Activities Preserve Bone Density in Older Adults**

– By Devon Andre Epoch Times Feb 15 2024

- Engaging in a year-long exercise program can help older adults (aged 70 to 85) maintain or even slightly improve the structural properties of their femoral neck despite a decrease in bone mineral density, a recent study at the University of Jyvaskyla in Finland has discovered. The participants, who were previously physically inactive, underwent a multi-component exercise training intervention.

- those who included more moderate and high-intensity activities in their routines experienced less bone density decline than those with lower activity levels or intensity. Postdoctoral researcher Tiina Savikangas emphasizes the significance of even short bursts of activity for bone health, noting that impacts comparable to brisk walking contribute to better preservation of bone mineral density.

- in daily life, such as performing jumping-like impacts without actually jumping—by lifting up on tiptoes and then dropping down onto the heels. This simple addition to routine activities can contribute to better bone health, especially in the femoral neck, which is susceptible to fall-related fractures.

- published in the journal Bone.

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## **BASICS: FOOD the preamble to Diabetes**

ALL Food is made up of

1. Carbohydrates & Fiber

main energy source. Sugar, starch. 1 gm = 4 calory

2. Protein - building blocks of body. 58% slowly convert to carb 1 gm= 4 calory

3. Fats - give flavor to food. 10% converts to carbs 1 gm = 9 cal

4. Water
5. Minerals
6. Vitamins

Diets? Think in grams. 1 lb= 456 cal      1oz = 30 gm      1 nickle = 5 gm

1 slice bread = 1 oz thus 30 gm = 15 gm carb/2.5gm protein/ 12.5 gm  
fiber+water

1 small orange = 100 gm = 10gm carb + water

1 oz meat = zero carbs / 7 gm protein / 5 gm fat / 18 gm water & fiber

More on Carbohydrates:

- monosaccharide = 1-chain eg) glucose, fructose, galactose    AVOID !!
- oligosaccharides = 2-4chains of simple sugar. eg) maltose (corn starch),  
sucrose(cane sugar), lactose (milk)
- polysaccharides = long complex chains of sugar ....STARCH as in potatoes  
More slowly absorbed with less imediate effect on blood sugar

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## **Diabetes Mellitus**

- As of 2020, 38% of all US adults had prediabetes.
- 37.3 million people have diabetes—that's 11.3% of the US population.
- 28.7 million people have been diagnosed with diabetes.
- 8.5 million people who have diabetes have not been diagnosed  
and do not know they have it.
- In 2017, 425 million people had diabetes worldwide
- Type 2 makes up about 90% of the cases.
- The WHO estimates that diabetes resulted in 1.5 million deaths in 2012,  
making it the 8th leading cause of death.

Diabetes, also known as diabetes mellitus, is a group of common endocrine diseases characterized by sustained high blood sugar levels.

- Diabetes is due to either the pancreas not producing enough insulin, or the cells of the body not responding properly to the insulin produced.
- Diabetes, if left untreated, leads to many health complications.
- Untreated or poorly treated diabetes accounts for approximately 1.5 million deaths per year.
- NON SPECIFIC SYMPTOMS include blurred vision, headache, fatigue, slow healing of cuts, and itchy skin.
- Prolonged high blood glucose can cause glucose absorption in the lens of the eye, which leads to changes in its shape, resulting in vision changes. Long-term vision loss can also be caused by diabetic retinopathy.
- classic symptoms of untreated diabetes are unintended weight loss, polyuria (increased urination), polydipsia (increased thirst), and polyphagia (increased hunger).

TYPES:

**TYPE 1 DIABETES** is characterized by loss of the insulin-producing beta cells of the pancreatic islets, leading to insulin deficiency.

Long ACTING ..... Lantus, levemir, Basaglar

INTERMEDIATE ..... NOVOLIN n, Humulin N

SHORT ..... Novolin R, Novolog, Humulin R  
Humalog, NovoRapid.

**TYPE 2 DIABETES** is characterized by insulin resistance, which may be combined with relatively reduced insulin secretion.

**GESTATIONAL DIABETES** resembles type 2 diabetes in several respects, involving a combination of relatively inadequate insulin secretion and responsiveness. It occurs in about 2–10% of all pregnancies and may improve or disappear after delivery.

- **COMPLICATIONS** due to damage in small blood vessels include damage to the eyes, kidneys, and nerves. **EYES**, known as diabetic retinopathy, is caused by damage to the blood vessels in the retina of the eye, and can result in gradual vision loss and eventual blindness. Diabetes also increases the risk of having glaucoma, cataracts, and other eye problems. It is recommended that people with diabetes visit an optometrist or ophthalmologist once a year.

- Damage to the **KIDNEYS**, known as diabetic nephropathy, can lead to tissue scarring, urine protein loss, and eventually chronic kidney disease, sometimes requiring dialysis or kidney transplantation.

- Damage to the **NERVES** of the body, known as diabetic neuropathy, is the most common complication of diabetes.

The symptoms can include numbness, tingling, sudomotor dysfunction, pain, and altered pain sensation, which can lead to damage to the skin.

- Diabetes-related **FOOT PROBLEMS** (such as diabetic foot ulcers) may occur, and can be difficult to treat, occasionally requiring amputation. Additionally, proximal diabetic neuropathy causes painful muscle atrophy and weakness.

**MANAGEMENT:**

Diabetes management concentrates on keeping blood sugar levels close to normal, without causing low blood sugar.

THE FOUNDATION OF DIABETIC MANAGEMENT IS:

dietary changes, exercise, and weight loss,  
THEN THE use of appropriate medications (insulin, oral medications).

I. 1<sup>st</sup> line           BIGUANIDE: inhibits liver glucose  
production &       increases peripheral glucose uptake  
METFORMIN

II. 1<sup>st</sup> LINE in T<sub>2</sub>DM + ASCVD/ CVA's

**GLP-1 RECEPTOR AGONISTS** Glucagon-like peptide-1  
receptor agonists

==> work by activating the GLP-1R,  
rather than inhibiting the breakdown of GLP-1as do  
DPP-4 inhibitors, and are considered more potent.

advantages over older insulin secretagogues, such as  
sulfonylureas or meglitinides, is that they have a lower risk of  
causing hypoglycemia.  
significant improvements in cardiovascular and renal  
outcomes.

1● albiglutide (Tanzeum, manufactured by GSK), approved  
in 2014

- 2● dulaglutide (Trulicity, manufactured by Eli Lilly), approved in 2014
- 3● exenatide (brand Byetta, mfg by AstraZeneca), approved 2005/2012
- 4● liraglutide (Victoza/, Saxenda for obesity, mfg by Novo Nordisk), approved in 2010
- 5● lixisenatide ( Adlyxin in US, mfg by Sanofi), approved in 2016
- 6● semaglutide (Ozempic/ Rybelsus, Wegovy for obesity, mfg by Novo Nordisk), approved in 2017
- 7● tirzepatide (Mounjaro, manufactured by Eli Lilly), approved in 2022

### III. 1<sup>st</sup> LINE T<sub>2</sub>DM WITH HEART FAILURE OR WITH RENAL FAILURE

**SGLT2 INHIBITORS:** SGLT2 inhibitors, also called gliflozins or flozins, are a class of medications that modulate Sodium -glucose transport proteins in the nephron (the functional units of the kidney),

- unlike SGLT1 inhibitors that perform a similar function in the intestinal mucosa

- THEY inhibit reabsorption of glucose in the kidney and therefore lower blood sugar WITH SUGAR LOADED URINE.
- gliflozins have been shown to provide significant cardiovascular benefit in patients

- 1● Bexagliflozin was approved brand Brenzavvy in January 2023

2● Canagliflozin was the first SGLT2 inhibitor approved March 2013, brand INVOKANA

3● Dapagliflozin is the first SGLT2 inhibitor approved EU 2012. United States brand FARXIGA, 2014.

4● Empagliflozin, approved US 2014, brand JARDIANCE by Boehringer Ingelheim.

5● Ertugliflozin was U S brand name STEGLATRO, 2017

#### IV. 2<sup>ND</sup> LINE: : : : **THIAZOLIDINEDIONES**

also known as glitazones. Thiazolidinediones or TZDs act by activating PPARs (peroxisome proliferator-activated receptors), a group of nuclear receptors, specific for PPAR $\gamma$  (PPAR-gamma, PPARG).

- Insulin resistance is decreased
- Adipocyte differentiation is modified
- VEGF-induced angiogenesis is inhibited
- Leptin levels decrease (leading to an increased appetite)
- Levels of certain interleukins (e.g. IL-6) fall
- Antiproliferative action
- Adiponectin levels rise

#### V. 2<sup>nd</sup> LINE : : : : : **SULFONYLUREAS**

Increase insulin secretion by binding Beta-cell receptors. Taken 30-60 minutes before food. Start with low dose and gradually increase over weeks

- 1• glipizide (Brand Glucotrol)
- 2• chlorpropamide (Brand Diabinese)

- 3• glimepiride (Brand Amaryl)
- 3• glyburide (Brand Micronase/ DiaBeta)
- 4• Tolbutamide (Tolinase)

VI. 2<sup>nd</sup> LINE : : : : DPP-4 INHIBITORS

a class of oral hypoglycemics that block the enzyme dipeptidyl peptidase-4 (DPP-4).

They inhibit enzyme that breaks down endogenous GLP (incretin secreted from intestinal L cells). Increased GLP reduces blood glucose by inhibiting glucagon release and stimulating insulin secretion. Avoid if hx of pancreatitis.

- 1• Sitagliptin (approved 2006, Merck & Co. as **Januvia**)
- 2• Vildagliptin[7] (EU 2007, Novartis as **Galvus**)
- 3• Saxagliptin (US 2009, as **Onglyza**)
- 4• Linagliptin (US 2011, as **Tradjenta** by Eli Lilly)
- 5• Alogliptin (US 2013, **NESINA** by Takeda)

VII. 2<sup>ND</sup> LINE : : : : : MEGLITINIDES

These increase insulin secretion with shorter onset and half-life than Sulfonylureas. Take before each meal, never when fasting.

Side effects include weight gain and hypoglycemia.

- 1• nateglinide (STARLIX)
- 2. repaglinide (PRANDIN)

VIII. 2<sup>ND</sup> LINE : : : : ALPHA-GLUCOSIDASE INHIBITORS

● These block polysaccharide and disaccharide breakdown and decrease postprandial hyperglycemia. Give WITH food. Start low and increase weekly . No use in patients with GI issues.

- work by preventing the digestion of carbohydrates (such as starch and table sugar). Carbohydrates are normally converted into simple sugars (mono- saccharides) by alpha-glucosidase enzymes present on cells lining the intestine, enabling mono-saccharides to be absorbed through the intestine. Hence, alpha-glucosidase inhibitors reduce the impact of dietary carbohydrates on blood sugar.

- 1● Acarbose- Precose or Glucobay

- 2 ● Miglitol – Glyset

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### HIGH FRUCTOSE CORN SYRUP

High-fructose corn syrup (HFCS) is about 55% fructose, a type of sugar. It takes your body more steps to breakdown fructose compared to glucose. High amounts of this sugar can lead to serious health issues.

1. Adds an unnatural amount of fructose to your diet HFCS comprise around 45% glucose and 55% fructose

2. Increases your risk of fatty liver disease

3. Increases your risk of obesity and weight gain  
HFCS, plays a key role in the development of obesity

4. Excessive intake is linked to diabetes

5. Can increase the risk of other serious diseases  
HFCS and sugar have been shown to drive inflammation, which is associated with an increased risk of obesity, diabetes, heart disease, and cancer.  
HFCS may exacerbate inflammatory diseases like gout.

6. Contains no essential nutrients. The definition of “Hallow calories”

Candy, packaged sweets (Twinkies), Soft drinks,  
Juice drinks, Fast food products (Apple Pie, dipping sauces)  
Ice Cream, breakfast foods (pancake syrup)

fruit preserves & Jams Many breads and crackers  
applesauce

CONCLUSION: STAY away from this stuff.

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## Traumatic BRAIN INJURY

MEMORY – there is more than ONE TYPE

For years, researchers and experts have debated the classification of memories. Many experts agree that there are **FOUR MAIN CATEGORIES OF MEMORY**. All other types of memory tend to fall under these four major categories.

Memory is sometimes also classified into stages and processes. People who classify memory into only two distinctive types, implicit and explicit memory, view that other types of memories like sensory, short-term, and long-term memories aren't types of memory but stages of memory.<sup>1</sup>

### **SENSORY MEMORY** (very short term memory)

Sensory memory allows you to remember sensory information after the stimulation has ended. Researchers who classify memory more as stages than types believe that all other memories begin with the formation of sensory memories.

Typically your sensory memory only holds onto information for brief periods. Remembering the sensation of a person's touch or a sound you heard in passing is sensory memory.

When a sensory experience keeps recurring, and you start to attach other memories to it, the sensory experience stops living in your sensory memory. It might move to your **SHORT-TERM MEMORY** or more permanently to your **LONG-TERM MEMORY**.

There are **THREE TYPES OF SENSORY MEMORY**:

- iconic, which is obtained through sight;
- echoic, which is auditory; and
- haptic, which is through touch, taste, or smell.

## **SHORT-TERM MEMORY**

As the name implies, short-term memory allows you to recall specific information about anything for a brief period.

Short-term memory is not as fleeting as sensory memory, but it's also not as permanent as long-term memory.

Short-term memory is also known as **PRIMARY OR ACTIVE MEMORY**.

Research estimates that short-term memories only last for about 30 seconds.

When you read a line in a book or a string of numbers that you have to recall, that's your short-term memory at work.

You can keep information in your short-term memory by rehearsing the information. For example, if you need to recall a string of numbers, you might keep repeating them to yourself until you input them. However, if you are asked to recall those numbers about 10 minutes after inputting them, you'd most likely be unable to.

**EIDETIC MEMORY: The Reality Behind the 'Photographic' Mind Working Memory**

**WORKING MEMORY** is a type of memory that involves the immediate and small amount of information that a person actively *uses as they perform cognitive tasks*.

While some experts view working memory as a fourth distinct type of memory, working memory can fall under the classification of short-term memory and, in many cases, is even used interchangeably.

Improving Your Memory With ADHD

## **LONG-TERM MEMORY**

We store a vast majority of our memories in our long-term memory. Any memory we can still recall after 30 seconds could classify as long-term memory. These memories range in significance—from recalling the name of a friendly face at your favorite coffee shop to important bits of information like a close friend’s birthday or your home address.

There is no limit to how much our long-term memory can hold and for how long. We can further split long-term memory into TWO MAIN CATEGORIES: explicit and implicit long-term memory.

## **EXPLICIT LONG-TERM MEMORY**

Explicit long-term memories are memories we consciously and deliberately took time to form and recall.

Explicit memory holds information such as your best friend’s birthday or your phone number. It often includes major milestones in your life, such as childhood events, graduation dates, or academic work you learned in school.

In general, explicit memories can be episodic or semantic.

Episodic memories are formed from particular episodes in your life. Examples of episodic memory include the first time you rode a bike or your first day at school.

Semantic memories are general facts and bits of information you absorbed over the years. For instance, when you recall a random fact while filling in a crossword puzzle, you pull it from your semantic memory.

Conditions such as Alzheimer’s disease heavily affect explicit memories.<sup>4</sup>

## **IMPLICIT LONG-TERM MEMORY**

We are not as deliberate with forming implicit memories as we are with explicit ones.

Implicit memories form unconsciously and might affect the way a person thinks and behaves.

Implicit memory often comes into play when we are learning motor skills like walking or riding a bike. If you learned how to ride a bike when you were 10 and only ever pick it up again when you are 20, implicit memory helps you remember how to ride it.

We can retrieve long-term memories a few different ways.

The three types of **MEMORY RETRIEVAL** are recall, recognition, and relearning.

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## **Shingles Vaccine May Increase Risk of Ocular Shingles Recurrence**

by Marina Zhang Epoch Times February 23, 2024

- Ocular shingles refers to all shingles that manifest in the eye area. Milder cases of ocular shingles typically occur near the eyelids, while more severe cases may cause inflammation inside the eyes and potentially lead to blindness.

- Researchers at the University of California (UC)–San Francisco found that, compared to unvaccinated people with a history of ocular shingles, those who receive the RZV have a 93 percent higher rate of developing ocular shingles again.