Average Urine Output Per Hour

Functions of a healthy kidney include maintaining a person's fluid balance, maintaining an acid-base balance; regulating sodium and other electrolytes; clearing toxins; regulating blood pressure; and regulating hormones, such as erythropoietin; and activation of vitamin D. The kidney is also involved in maintaining blood pH balance. e1ac1e7960

Urethroplasty Trauma, iatrogenic injury and infections are the most common causes of urethral injury or defect requiring repair. With an average operating room time of between three and eight hours, urethroplasty is not considered a minor operation Urethroplasty is the surgical repair of an injury or defect within the walls of the urethra. It is probably the only useful modality of treatment for long and complex strictures, though recurrence rates are higher in this difficult treatment group. flap, and Johansen's urethroplasty. Urethroplasty is regarded as the gold standard treatment for urethral strictures and offers better outcomes in terms of recurrence rates than dilatations and urethrotomies e1ac1e7960

Most bedwetting is a developmental delay—not an emotional problem or physical illness. Only a small percentage (5 to 10%) of bedwetting cases have a specific medical cause. Bedwetting is commonly associated with a family history of the condition. Nocturnal enuresis is considered primary when a child has not yet had a prolonged period of being dry. Secondary nocturnal enuresis is when a child or adult begins wetting again after having stayed dry. e1ac1e7960

Fluid balance Euvolemia is the state of normal body fluid volume, including blood volume, interstitial fluid volume, and intracellular fluid volume; hypovolemia and hypervolemia are imbalances. Water is necessary for all life on Earth. Humans can survive for 4 to 6 weeks without food but only for a few days without water. The core principle of fluid balance is that the amount of water lost from the body must equal the amount of water taken in; for example, in humans, the output (via respiration, perspiration, urination, defecation, and expectoration) must equal the input (via eating and drinking, or by parenteral intake).)[citation Fluid balance is an aspect of the homeostasis of organisms in which the amount of water in the organism needs to be controlled, via osmoregulation and behavior, such that the concentrations of electrolytes (salts in solution) in the various body fluids are kept within healthy ranges. more difficult to match fluid loss by reducing urine output (the kidneys must produce at least some urine in order to excrete metabolic waste e1ac1e7960

With an average operating room time of between three and eight hours, urethroplasty is not considered a minor operation. Patients who undergo a shorter duration procedure may have the convenience of returning home that same day (between 20% and 30% in total of urethroplasty patients). Hospital stays of two or three days duration are the average. More complex procedures may require a hospitalization of seven to ten days. e1ac1e7960

Assessment of kidney function measured, as urine albumin or urine protein levels, measured either at a single instance or, because of variation throughout the day, as 24-hour urine tests Assessment of kidney function occurs in different ways, using the presence of symptoms and signs, as well as measurements using urine tests, blood tests, and medical imaging e1ac1e7960

== Biography == e1ac1e7960 Graham MacGregor Bull grew up in South Africa. After education at Cape Town's Diocesan College, he attended the University of Cape Town, where he graduated MB ChB in 1939. After briefly engaging in general practice, he was appointed tutor and medical assistant at the Groote Schuur Hospital. e1ac1e7960

Riboflavin subsequent 24-hour urine collection. Riboflavin is prescribed to treat corneal thinning, and taken orally, may reduce the incidence of migraine headaches in adults. The coenzymes are also required for the metabolism of niacin, vitamin B6, and folate. It is essential to the formation of two major coenzymes, flavin mononucleotide and flavin adenine dinucleotide. 1 mg, urinary excretion increased rapidly, so that with a dose of 2. 5 mg, urinary output was 800 Riboflavin, also known as vitamin B2, is a vitamin found in food and sold as a dietary supplement. Beyond a load dose of 1. These coenzymes are involved in energy metabolism, cellular respiration, and antibody production, as well as normal growth and development e1ac1e7960

Riboflavin deficiency is rare and is usually accompanied by deficiencies of other vitamins and nutrients. It may be prevented or treated by oral supplements or by injections. As a water-soluble vitamin, any riboflavin consumed in excess of nutritional requirements is not stored; it is either not absorbed or is absorbed and quickly excreted in urine, causing the urine to have a bright yellow tint. Natural sources of riboflavin include meat, fish and fowl, eggs, dairy products, green vegetables, mushrooms, and almonds. Some countries require its addition to grains. e1ac1e7960

Glomerular filtration rate , milliliters per minute (mL/min). G F R = Urine concentration × urine flow Plasma concentration Renal functions include maintaining an acid–base balance; regulating fluid balance; regulating sodium, potassium, and other electrolytes; clearing toxins; absorption of glucose, amino acids, and other small molecules; regulation of blood pressure; production of various hormones, such as erythropoietin; and activation of vitamin D. units of volume per time, e. Compare to filtration fraction. g e1ac1e7960

Graham MacGregor Bull Calculating fluid intake so that it does not exceed insensible loss plus urine output, is probably the most important part of the 'Bull regime'. An individual Sir Graham MacGregor Bull (30 January 1918 – 14 November 1987) was a South African-British physician, nephrologist, medical administrator, and director of medical research e1ac1e7960

Schistosomiasis is spread by contact with fresh water contaminated with parasites released from infected freshwater snails. Medical diagnosis is made by finding the parasite's eggs in a person's urine or stool. Diagnosis can also be confirmed by finding antibodies against the disease in the blood. e1ac1e7960 There are four commonly used types of urethroplasty performed; anastomotic, buccal mucosal onlay graft, scrotal or penile island flap, and Johansen's urethroplasty. e1ac1e7960 The glomerular filtration rate is the flow rate of filtered fluid through the kidney. The creatinine clearance rate (CCr or CrCl) is the volume of blood plasma that is cleared of creatinine per unit time and is a useful measure for approximating the GFR. Creatinine clearance exceeds GFR due to creatinine secretion, which can be blocked by cimetidine. Both GFR and CCr may be accurately calculated by comparative measurements of substances in the blood and urine, or estimated by formulas using just a blood test result (eGFR and eCCr). The results of these tests are used to assess the excretory function of the kidneys. Staging of chronic kidney disease... e1ac1e7960 In treating hypovolemic shock, it is important to determine the cause of the underlying hypovolemia, which may be the result of bleeding or other fluid loss. To minimize damage to tissues from insufficient blood flow, treatment involves quickly replacing lost blood or fluids, with consideration of both rate and the type of fluids used. e1ac1e7960 Composting toilets, together with the secondary composting step, produce a humus-like end product that can be used to enrich soil if local regulations allow this. Some composting toilets... e1ac1e7960

Schistosomiasis Schistosomiasis affects humans as well as other animals. Eggs can be found in the urine in Schistosomiasis, also known as snail fever, bilharzia, and Katayama fever is a tropical disease, specifically a helminthiasis caused by the parasitic flatworm of the genus Schistosoma. egg output can be quantified by using the Kato-Katz technique (20 to 50 mg of fecal material) or the Ritchie technique. In children, schistosomiasis may cause failure to thrive, poor growth, and learning difficulties. Schistosomiasis is classified as a helminth infection. Those who have had a schistosomiasis infection for a long time

may experience liver damage, kidney failure, infertility, or bladder cancer. Symptoms include abdominal pain, diarrhea, bloody stool, or blood in the urine. It affects the urinary tract or the intestines e1ac1e7960

Hypovolemic shock Urine output declines. and respiratory rate are significantly elevated (more than 120 BPM). Capillary refill is delayed. Class 4: Volume loss over 40% Hypovolemic shock is a form of shock caused by severe hypovolemia (insufficient blood volume or fluid outside of cells in the body). Hypovolemic shock is a medical emergency; if left untreated, the insufficient blood flow can cause damage to organs, leading to multiple organ failures. It can be caused by severe dehydration or blood loss e1ac1e7960

Nocturnal enuresis This hormone burst reduces the kidney's urine output well into the night so that the bladder does not get full until morning Nocturnal enuresis (NE), also informally called bedwetting, is involuntary urination while asleep after the age at which bladder control usually begins. Complications can include urinary tract infections. arginine vasopressin or AVP). Bedwetting in children and adults can result in emotional stress e1ac1e7960

== Description == e1ac1e7960 The kidney has many functions, which a well-functioning kidney realizes by filtering blood in a process known as glomerular filtration. A major measure of kidney function is the glomerular filtration rate (GFR). e1ac1e7960 Tachycardia, a fast heart rate, is typically the first abnormal vital sign. When resulting from blood loss, trauma is the most common root cause, but severe blood loss can also happen in various body systems without clear traumatic injury. The body in hypovolemic shock prioritizes getting oxygen to the brain and heart, which reduces blood flow to nonvital organs and the limbs, causing them to grow cold, look mottled, and exhibit delayed capillary refill. The lack of adequate oxygen delivery causes the blood to become... e1ac1e7960 In many composting toilet designs, a carbon additive such as sawdust, coconut coir, or peat moss is added after each use. This practice creates air pockets in the human waste to promote aerobic decomposition. This also improves the carbon-to-nitrogen ratio and reduces potential odor. Most composting toilet systems rely on mesophilic composting. Longer retention time in the composting chamber also facilitates pathogen die-off. The end product can also be moved to a secondary system – usually another composting step – to allow more time for mesophilic composting to further reduce pathogens. e1ac1e7960 == Phases of the operation == e1ac1e7960 Methods of preventing the disease include improving access to clean water and reducing the number of snails. In areas where the disease is common, the medication praziquantel may be given once a year to the entire at-risk group. This is done... e1ac1e7960 Bedwetting is... e1ac1e7960 Cardiologist Sir John McMichael appointed him to a lectureship at the school of medicine in Hammersmith. Shortly after the end of WWII, Willem Johan Kolff, the famous pioneer of hemodialysis, donated artificial kidney machines to institutions in Poland, as well as Amsterdam and London. Kolff briefly worked at Hammersmith to set up an artificial kidney machine with the rheumatologist Eric Bywaters and the nephrologist A. Mark 'Jo' Joekes. Bull... e1ac1e7960 These parts of the operation are common to all... e1ac1e7960 In its purified, solid form, it is a water-soluble yellow-orange crystalline... e1ac1e7960 Profuse sweating can increase the need for electrolyte replacement. Water-electrolyte imbalance produces headache and fatigue if mild; illness if moderate, and sometimes even death if severe. For example, water intoxication (which results in hyponatremia), the process of consuming too much water too... e1ac1e7960

Composting toilet This process leads to the decomposition of organic matter and turns human waste into compost-like material. Most composting toilets use no water for flushing and are therefore called "dry toilets". A vermifilter A composting toilet is a type of dry toilet that treats human waste by a biological process called composting. Composting is carried out by microorganisms (mainly bacteria and fungi) under controlled aerobic conditions. Some composting toilets have urine diversion systems in the toilet bowl to collect the urine separately and control excess moisture. regulations allow this e1ac1e7960

Treatments range from behavioral therapy, such as bedwetting alarms, to medication, such as hormone replacement, and even surgery such as urethral dilation. Since most bedwetting is simply a developmental delay, most treatment plans aim to protect or improve self-esteem. Treatment guidelines recommend that the physician counsel the parents, warning about psychological consequences caused by pressure, shaming, or punishment for a condition children cannot control. e1ac1e7960 In 1947, the South African Council for Scientific and Industrial Research awarded him a travelling fellowship, enabling him to study in London at the Hammersmith Hospital's Royal Postgraduate Medical School, where he graduated MD in 1947 with thesis Postural Proteinuria. e1ac1e7960