

The Doctor Prescribes Colors

*The Influence of Colors on
Health and Personality*



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CHAPTER I.

THE RIGHT COLORS AND GENERAL WELL-BEING

We are constantly affected by the colors of our surroundings. The right color combinations in our homes, offices, shops, travel accommodations and hospitals are exceedingly important, both for health and efficiency. Injudicious color combinations are not only in bad taste; they also work havoc with our well being.

Almost every doctor is acquainted with instances in which the wrong color was the cause of mental upset or physical discomfort. Dr. Sabin of New York University reports several cases of mental irritation caused by harmful color combinations. He relates the case of a woman who was nervous, fretful and complained of ill-health generally. An examination by the family doctor revealed nothing organically amiss. It was noticed, however, that on her visits away from home she improved.

This gave the doctor a clue, and he sent this woman and her daughter on an extended trip to Europe. The daughter wrote back saying that her mother's mental condition and health had improved notably.

The doctor called in an interior decorator and the two made an inspection of his patient's home. The decorator was at once struck by the violent display of colors in this patient's bedroom. It was a disturbing combination of deep violet and purple, colors which have a very exciting effect. Lighter colors were substituted, calming greens and yellows. When the patient returned home from her European trip those black moods never returned again. There is no doubt that living in a room of such violent display of irritating colors had a great deal to do with upsetting her emotionally and mentally.

Dr. Sabin reports another interesting case in which colors exerted a striking influence. The office of a factory had been a warm bright yellow. An efficiency expert was called in and he decided that a slate blue would be more practical and would need less cleaning or repainting. This expert was woefully ignorant about colors and their effects on human beings.

When winter came the stenographers began complaining of the cold, something that had not happened before, when the room had been a bright cheery yellow. The janitor protested that the thermometer showed 72 degrees, the customary winter temperature of this office. The complaints, however, continued and finally the thermostat was changed to 75 degrees. The girls in the office continued wearing their coats until the cold, slate blue was again repainted a warm yellow. After this repainting the room felt warmer at 72 degrees than it had at 75 with slate blue walls.

A somewhat similar instance occurred a little later. A manufacturer not far from New York had the women's cafeteria in his factory repainted a light blue. It was not long before the women began to complain that the cafeteria was always chilly and that they had to wear their coats at lunch. Here again the temperature in the cafeteria was precisely the same as that elsewhere in the factory, where the girls could work in comfort without their coats. This state of affairs continued until a color expert was called in who recommended that the baseboards be painted orange and that orange slip covers be placed on the chairs. When this was accomplished the complaints stopped.

That colors play an important role in interior decorations has long been realized. In the early 18th century there was a vogue for blue and purple window glass because it was thought to be healthful. This was in time shown to be true, for both of these colors are very restful

and calming. With the passing of the years, color schemes and combinations as a vital item in interior decoration began to receive more serious consideration.

In these days of high-speed travel the part that colors play in the decoration of airplanes has received the attention of Howard Ketchum, color engineer, who is devoting himself to the task of boosting travel via airplane.

"Certain colors," he explains, "are conducive to nausea. Others breed confidence and cheer."

Mr. Ketcham is advising his airplane clients not to serve mayonnaise and to avoid coffee, if possible. Yellow and coffee colors may have unpleasant effects on the stomach. Yellow, likewise, is to be avoided, if possible, in the interior decorations of a plane.

On the other hand, Mr. Ketcham has found that a green which is neither blue nor yellow has a cheerful effect on air passengers, and is particularly suitable if it is grayed a little.

"Green is appropriate for all climates," is the belief of Mr. Ketcham. "In the summer it looks cool, and yet in the winter it does not look cold."

New planes which are being built for the Pan-American Airways, for service to South America and across the Pacific, will have detailed interior and exterior color schemes worked out by Mr. Ketcham.

"Everything in them is keyed to green," he asserts. "We have used certain shades of brown and red." The sheets, blankets and almost all furnishings will be colored.

There is no doubt that we are all very definitely influenced by the colors of our surroundings. A very interesting illustration of this influence was recently afforded when the city of London, in an attempt to reduce the number of suicides from Blackfriar's Bridge, painted that ancient and gloomy structure a bright green. Thereafter suicides

from that bridge were reduced more than a third. Previously the black, drab color of the old bridge invited self-destruction, but the new, bright cheery green has just the opposite effect.

Not only in homes is the importance of the color scheme being appreciated as a source of happiness and efficiency. Far-sighted educators have begun to realize that the colors used in the decoration of schoolrooms play a very important role in learning. For years the dreary blackboard formed the chief motif in the decoration scheme of the classroom. The surrounding walls were equally cold and gloomy. Now, in Elgin, Illinois, white blackboards, or more properly, whiteboards are being used, and with happy results. Not only is black chalk on white board easier to read, but the white color of the board imparts a decidedly cheerier atmosphere to the entire classroom. After several months of use it has been found that besides relieving eyestrain, the whiteboards combined with light-colored walls make the classroom more cheerful, and learning a much more pleasant adventure.

Color has also invaded the still more dreary shops and factories. Superintendents of shops are now realizing that cheery surroundings can go a long way in making the hours pass more quickly, increasing the efficiency of their workers and elevating the quality of the work done. White-washed walls, dirty neutral colored floors and coal black machines are dismal and depressing.

There is now a definite trend toward bright, cheery colors in interior decoration of shops and factories. The print-shop of the Hershey Chocolate Company at Hershey, Pennsylvania, is but one example of many, of how a little splash of color will go a long way.

The machines are not the usual, depressing black. They have all been painted with a rich, Deft-blue, oilproof ma-

chine enamel of a tough, quick-drying type. The floor is of oiled maple. Pillar bases are light gray, the upper portion is a bright yellow. Side walls are glazed hollow tile of a mottled tan color, and the ceiling is a bright buff in order to avoid too great a variance between the glazed tile and ceiling areas. Table tops are mahogany, and waste cans are light blue. There is a sufficient display of colors to brighten up the place considerably. Time passes faster, work is accomplished much easier and with greater efficiency, and the men feel happier and brighter.

With but a little thought the average shop can be brightened up with colors. Thus, a maximum of white ceiling and side wall should be provided to conserve the light from natural sources. Sash should not be painted gray or black, not only because these colors are depressing, but also for the very practical reason that these colors absorb as much as 47 per cent of the light entering such areas. Sash should be painted white or ivory for more light reflection.

Carrying this color scheme further, the five-foot dado, or lower wall panel, should be a light green or tan, preferably on the gray-green or jade green side for softness, and also to kill the very appreciable but generally ignored "ground light" reflected upwards to the eyes of the machine operators. The ground light may be a very real accident hazard.

As for the shop machinery, all starting equipment, clamp-rack, knobs, machine table edges, and guards should be painted a bright red or scarlet. This becomes very effective on machine-table edges when they carry a narrow stripe of bright yellow along the center of the red.

As for the bodies of the machines, they should be of some light color. A light to medium chrome green has been found very effective. They may also be a soft light

straw or tan, trimmed with bright green and scarlet. At any rate, heavy, deep colors should be avoided, as they make the shop dull and dreary and the work is affected in the same way.

It has been found that in shops and plants where colors have entered into the scheme of things the efficiency of the workmen has increased, the quality of the work much improved, and the health of the workers greatly benefited. The average human being would rather do his work in a brightly colored, cheerful shop than in one decorated with dull, dirty grays and funereal blacks.

Color enters into all our activities. Athletes have also come to realize that color, properly applied, plays a most important part in maintaining efficiency at a high peak. In 1928, Alonzo Stagg, football coach at the University of Chicago, made a practical application of colors in increasing the effectiveness of his football players. He fitted out two dressing rooms for his team. One was decorated in blue for rest and recuperation, and the second was painted in flaming red in which he delivered his pep talks. The red room was used before the players went out on the field, and it acted as a wonderful stimulant. The blue room was used after the game to afford rest and recuperation.

The color scheme of the home very often enters into the success or failure of the social amenities. When the Empress Josephine was informed that a woman she detested would on a certain occasion wear a dress of deep green, she had her drawing room, wall paper, furniture, coverings and rugs, hastily re-decorated at great cost, to a shade of blue that would make the green dress appear glaring and vulgar. She certainly knew how to use colors to make a person she did not care for uncomfortable.

On the other hand, the use of colors can make a social gathering a huge success. A woman was giving a dinner

party and wanted to employ colors to the best advantage. She approached Mr. Howard Ketcham, who knows something about colors, for advice.

"Try magenta light," he suggested. "Buy three or four 1000-watt lamps and some holders. Put magenta-colored slides over the lamps and plant them around the floor under the furniture. Then turn out all the other lights and see what happens."

His instructions were carried out. The party was a huge success. The soft, flattering glow had made the women look ten years younger. The women were pleased, the men were gallant. The conversation flowed easily and gracefully. The food tasted better, and everyone's spirits ran high.

Colors have also come to the hospitals where they are needed more than in any other place. No longer is the dominating color white. The Doctor's Hospital in New York has long realized the importance of colors in making the patient and his visitors feel cheerful. The foyer is decorated in green and the page-boys wear dark green uniforms. The bedrooms have chintz hangings and there is a tasteful display of soft, comforting colors everywhere.

But colors do not enter into the scheme of only the more exclusive hospitals. The idea is spreading into the city hospitals also. Federal art projects have been called upon to brighten things up. At the Queens Hospital a color project is now in process in the form of a painting called *The Development of Medicine*. It will be 360 square feet, and it will be on the walls of the incoming and outgoing patients' room. In Greenpoint Hospital the children's medical ward solarium has a country landscape and a circus as a background—850 square feet—with bright gay colors. Two black pickaninnies swinging from a cocoanut palm decorate the children's ward at Harlem Hospital. These

various color schemes have worked wonders in bolstering up the patient's morale and helping him to take a more cheerful view of things.

Color has even invaded the operating-room. White is no longer regarded as the only desirable color. Blue-green is now common in hospital operating-rooms. It rests the surgeon's eyes and makes his work surer and more efficient.

One hospital recently had a whole floor of rooms done in various bright, cheery colors, instead of the monotonous white. So popular was this floor that nurses as well as patients were anxious to get assigned to the brightly colored ward. In time the whole hospital assumed a gay color, and the results were remarkable, both from the viewpoint of health and morale.

Colors are now regarded as a very essential item in our everyday activities. There is no doubt that we are affected by the colors of our surroundings, whether in the home or in our place of business. The right colors play just as important a part in maintaining health as do the right food.

CHAPTER II.

THE RIGHT COLORS FOR PROPER DIGESTION

Not so long ago a most interesting dinner was given by Mr. Samuel G. Hibben, illumination engineer and authority on light and colors.

At this dinner, food and drink were the best that money could buy. There was gay music and story telling, but the dinner was far from enjoyable. And the reason was this.

Mr. Hibben had arranged special lighting for the evening. Instead of ordinary clear or frosted lamp bulbs, he substituted especially designed filter lamps which cut out all the ordinary spectrum of colors except greens and reds.

When the guests strolled in leisurely they were a laughing, hearty lot. But as soon as they were in the dining room they began to notice things, queer things. Steaks were whitish gray. Celery was gaudy pink. Milk had the unwholesome color of blood, and the salads were as blue as the sky. Lemons had the color of oranges, and the coffee had a pale, sickly yellow tinge. Fresh green peas looked like black caviar, and the peanuts were a brilliant scarlet.

The food and cooking were of the best, but the broken spectrum lights imparted strange and unusual colors to the food. Most of the guests lost their appetites and could not eat. A few hardier souls did eat some of the weirdly tinted foods. They became violently ill, although the food was good and the taste perfect. Mr. Hibben's unusual experiment was a complete success.

This dinner party was a demonstration in a most dramatic way of the effects of colors not only upon the sense of sight, but also upon the related senses of touch and smell.

Mr. Hibben was curious to know what happened when food assumed unusual colors. He found out, much to the dismay of his dinner guests. He proved to his own satisfaction that the right colors are absolutely essential for proper digestion.

Unaccustomed colors in foods have an adverse effect on the digestion. This is fact that is well established. Years before Mr. Hibben gave his little party, cooks who loved to experiment with colors in food knew that when a food assumed a new color it somehow seemed to lose its appeal. Red butter on green bread may taste the same as yellow butter on white bread, but it is not quite as easy to swallow and digest because the color combination is a strange one.

There are many vegetable dyes on the market with which it is easy to tint foods various colors. After several years of experimentation along this line the practice has fallen into disuse, because the colors seem to act as destructive influence on the appetite. Somehow they make the gayly colored food appear not only indecent but even poisonous.

Those who are not very well acquainted with the color psychology of food still continue to experiment. Only recently Professor H. E. Botsford of the New York State College of Agriculture found a way to color the inside of eggs. Control of the hen's diet to let her eat more or less of a dye called xanthophyll, found in a number of plants and grains, was the method used. With this dye it is possible to color the yolk any color desired, without affecting the taste or wholesomeness of the egg.

In time a supply of deep orange, green, gray, blue and other colored eggs (yolks) found their way to the restaurants. Those who tried these strangely colored eggs found them hard to digest and enjoy. The old-fashioned

natural combination of yellow yolk and white is still the best. Weird colors in foods may be a novelty, but evidently it is not a welcome one.

Another interesting thing in connection with colors and food is that the container in which the food is served has a great deal to do with digestion, almost as much as the color of the food itself. Serving milk in red glasses has been tried by many restaurants and cafes and found to be a hindrance to the digestive processes. The red imparts a blood-like aspect to the milky white and this is not very helpful. Even blue glasses for white or neutral colored drinks somehow interferes with the enjoyment of the drink. About the only neutral or colorless drinks that may be served in colored glasses are cocktails. In most other cases, the relation of the drink to the color of the glass must be taken into consideration.

Dark beverages should be served in dark glasses. Thus light beer served in a dark brown or black glass somehow does not taste just right, but stout, porter or Guinness when served in a black glass or dark brown glass seems to have a better taste than when served in a white glass or a light colored one.

Milk is best served only in colorless glasses, because the dense white color seems to take on the tint of the container and subconsciously suggests another beverage. If, however, the milk is altered in color by the addition of chocolate it may be served in a brown glass with an apparent accentuation of the chocolate taste. Similarly, milk mixed with strawberry syrup can safely be served in a deep red glass, and the strawberry flavor will seem to have a better taste.

As regards the serving of food in colored dishes, modern chemistry has perfected a whole new series of materials and plastics from which dishes of every color of the rain-

bow may be made. A display of lively, light colors at the table imparts a festive air even to the most commonplace meals and makes them taste better.

Unlike beverages the serving of food in brightly colored dishes does not act as a deterrent to digestion. In fact, it has just the opposite effect. Serving a roast in a bright yellow plate makes it taste a little better than serving it in the regulation white. Beetle-ware plates, dishes and cups, colored in the different tints of the rainbow are available. A bright display of color in the dinner-ware will make even the most ordinary meals look like a feast.

Monotonously colored food, though not actually repellant, is not very appetizing. A restaurant owner found that serving a dinner consisting of pork chops, potatoes, cabbage and lima beans was never popular. The reason is that all these foods are of a similar hue, and though tasty, had no eye appeal. By substituting green peas for the lima beans, red cabbage for the white cabbage and browning the potatoes he created a lively eye appeal and increased the demand for this dish. This addition of color made the combination look much tastier.

Serving a meal of similarly colored foods, no matter how appealing to the sense of taste and smell, is never very popular. Contrast in color, red and yellow, green and white, brown and gray, and other contrasting colors, as well as variety in colors, will go a long way in making the food taste better.

Lighting effects at the dinner table also exert a most profound effect on the enjoyment of the meal. However, some thought must be given to the color of the lights used. The most desirable colors are a warm red, orange, yellow and true green. The colors to be avoided are yellow-green, lemon-yellow, blue, violet and purple red, for these somehow do not seem to go well with the food.

Always popular are browns and tans of almost all shades and hues. They always seem to make the food taste better. Amber lights are very popular and are to be found in almost all inns. Other popular colors are red orange, pink, pale orange and warm pale yellows. The colors that seem to clash with the food are yellow green, cool pinks and purples, and when these colors have been tried the appetite for eating was never very strong. Perhaps these unpopular colors may be used as an added aid to reduce, for they certainly make the food taste insipid, and not very much of it is eaten when these sickly colors are used.

When the color scheme of the surroundings accentuate the type of food served and blend with the natural colors of the food on the table, the sense of taste seems to be livelier. For taverns and chop-houses colors suggesting hearty meals are desirable. The most successful inns and taverns are those which display the right colors. Thus, the walls are usually a rich tan which suggests well-baked breads and well roasted meats. To heighten the effect of good food there should be suggestions of roast-beef red in the motif of the designs. Light orange, yellow the color of butter and green suggesting cool lettuce will further help impart the suggestion that the food is good, wholesome and tasty. In such a color scheme the table cloths should be pure white to serve as a contrast with the brown, greens, reds and yellows of the food served. The table wear should be of a light blue color.

The restaurateur who knows his colors in addition to his foods and savors will always get the most diners. Enjoyment of food depends not only upon texture, flavor and savor of the food served. It depends also very largely upon the color of the food and the color of the surroundings.

The color idea at meals has now extended to the post-prandial cigarette. Otto L. Miller has been granted a patent for treating cigarettes to give off colored smoke. It is a well-known fact that half of the enjoyment of cigarettes comes from watching its smoke. Those who have smoked a cigarette in the dark know that somehow it seems to taste differently.

When the cigarette smoke has a distinct color it adds enjoyment to the smoke. These new cigarettes give off smoke of various hues. Thus, brown, green, red and other colors may be imparted to the smoke without in any way injuring the quality of the tobacco. The after-dinner cigarette may be smoked in the proper color surroundings giving off blending colors or contrasting colors, according to the tastes of the smoker. *Perhaps digestion may go on smoother when the after-dinner smoke is a soothing green.*

As regards food itself, it has been found that colors are exceedingly important in keeping the food free from contaminating influences. Dr. Mayne R. Coe in a federal bureau at Washington discovered that certain colors act as preservatives for food. Bacterial organisms thrive in light and are stimulated by particular color radiations.

Some colors, particularly a chlorophyl or sextant green keep out the most stimulating color frequencies. Dr. Coe wrapped his foods to be preserved in green colored paper. Similar foods not so wrapped, and exposed to similar conditions, spoil quickly, while green-protected foods remain sweet and fresh. With some foods, black wrappers are most effective as they shut out all life-giving radiations that promote the growth of bacteria.

Many years ago Luther Burbank, the wizard of plant culture, said: "Color and flavor both aid digestion very favorably." It is now realized that color is just as important as flavor, particularly the right color.